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      290              295              300
Ser Val Met Thr Asn Met Arg Ala Pro Ser Thr Thr Gly Gly Ile Gly
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Ala Val Gly Ser Phe Asn Ser
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<210> 2861
 <211> 756
 <212> DNA
 <213> Homo sapiens

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<400> 2861
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420
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540
gatgcttctt cgtaacaca agtaacaaa gtgcaccagc attcagctgt ccagcagaac
600
tatgtgtctc cattacaggc caccatcagt aaatccgaa ccaaccccg cgtgaagtta
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<210> 2862
 <211> 252
 <212> PRT
 <213> Homo sapiens

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<400> 2862
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Ser Leu Asp Glu Asp Leu Ser Phe His Ser Pro Ser Leu Asp Leu Val
20          25          30
Ser Glu Ala Leu Ala Val Ile Asn Asn Gly Asn Lys Gly Pro Pro Val
35          40          45
Gly Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg

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50		55		60	
Glu	Glu	Lys	Leu	Ala	Ser
65					
Lys	Lys	Leu	Asp	Ser	Thr
Gly	His	Thr	Gly	Pro	Val
Gly	Ile	Ser	Ser	Gly	Leu
Val	Ser	Leu	Glu	Pro	Leu
Arg	Ser	Ser	Gln	Ile	His
Ser	Ser	Ser	Gln	Ala	Gln
Ser	Glu	Ala	Gln	Asp	Ala
Gln	His	Ser	Ala	Val	Gln
Ile	Ser	Lys	Ser	Gln	Thr
Gln	Leu	Ser	Cys	Ser	Ser
Met	Tyr	Arg	Leu	Pro	Leu

<210> 2863

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2863

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ccacaagtca atagcctcct taaagctaata gaatacagtt tcaaagtgcc agaatttgac
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attgaggacc ggagaagtgc agcaacctgc ttgcagacca gagggatgct tttggggggt
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711

<210> 2864

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2864

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Cys Val Glu Arg Ala Pro Ser Gly Gly Val Val Val Ala Pro Ser Ser
      20           25           30
Ser Gly Arg Ile Val Trp Ser Pro Ala Val Pro Gly Ile Pro Val Arg
      35           40           45
Ser Ser Ser Leu Pro Leu Phe Ser Asp Ala Met Pro Ala Pro Thr Gln
      50           55           60
Leu Phe Phe Pro Leu Ile Arg Asn Cys Glu Leu Ser Arg Ile Tyr Gly
65           70           75           80
Thr Ala Cys Tyr Cys His His Lys His Leu Cys Cys Ser Ser Ser Tyr
      85           90           95
Ile Pro Gln Ser Arg Leu Arg Tyr Thr Pro His Pro Ala Tyr Ala Thr
      100          105          110
Phe Cys Arg Pro Lys Glu Asn Trp Trp Gln Tyr Thr Gln Gly Arg Arg
      115          120          125
Tyr Ala Ser Thr Pro Gln Lys Phe Tyr Leu Thr Pro Gln Val Asn
      130          135          140
Ser Ile Leu Lys Ala Asn Glu Tyr Ser Phe Lys Val Pro Glu Phe Asp
145          150          155          160
Gly Lys Asn Val Ser Ser Ile Leu Gly Phe Asp Ser Asn Gln Leu Pro
      165          170          175
Ala Asn Ala Pro Ile Glu Asp Arg Arg Ser Ala Ala Thr Cys Leu Gln
      180          185          190
Thr Arg Gly Met Leu Leu Gly Val Phe Asp Gly His Ala Gly Cys Ala
      195          200          205
Cys Ser Gln Ala Val Ser Glu Arg Leu Phe Tyr Tyr Ile Ala Val Ser
      210          215          220
Leu Leu Pro His Glu Thr Leu Leu Glu Ile Glu Asn Ala
225          230          235

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<210> 2865

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2865

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120
ctgcagtgtg aagttttgat atgtgatagc agtgaccacc agtctcgtcg caatcaaggt
180
tgtgtctcca gaagcaaacy agacatttct tcatataaat ggaaaaacaga ttccatcata
240

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ggaccattc gtctgaaaag ggatcgaagt gcaagtggca attcaggatt tcagcatgaa
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 360
 gttctagctc tgaatgtggt gactgtagcg acaatcacag tgaggcattt tgtaaatcaa
 420
 cgggcgaact acaaaatacca gaagctgcag aactattaac taacagggtcc aaccctaagt
 480
 gagacatgtt tctccaggat gccaaaggaa atgctacctc gtggctacac atattatgaa
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 585

<210> 2866

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2866

Glu	Arg	Arg	Ser	Ser	Arg	Arg	Gln	Arg	Gln	Phe	Phe	Lys	Phe	Leu	Arg
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Ser	Met	Ser	Ser	Val	Tyr	Leu	Gln	Cys	Lys	Val	Leu	Ile	Cys	Asp	Ser
			20					25				30			
Ser	Asp	His	Gln	Ser	Arg	Cys	Asn	Gln	Gly	Cys	Val	Ser	Arg	Ser	Lys
		35				40					45				
Arg	Asp	Ile	Ser	Ser	Tyr	Lys	Trp	Lys	Thr	Asp	Ser	Ile	Ile	Gly	Pro
		50			55					60					
Ile	Arg	Leu	Lys	Arg	Asp	Arg	Ser	Ala	Ser	Gly	Asn	Ser	Gly	Phe	Gln
65				70					75					80	
His	Glu	Thr	His	Ala	Glu	Glu	Thr	Pro	Asn	Gln	Pro	Phe	Asn	Ser	Val
			85					90					95		
His	Leu	Phe	Ser	Phe	Met	Val	Leu	Ala	Leu	Asn	Val	Val	Thr	Val	Ala
			100					105					110		
Thr	Ile	Thr	Val	Arg	His	Phe	Val	Asn	Gln	Arg	Ala	Asp	Tyr	Lys	Tyr
		115					120					125			
Gln	Lys	Leu	Gln	Asn	Tyr										
			130												

<210> 2867

<211> 444

<212> DNA

<213> Homo sapiens

<400> 2867

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 120
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 180
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 240
 tgggtgtggc gctgaccgtg gacagcgggg ccttagccgt ctccctctaa tccagcagggt
 300

tccacatggc gaccaagctc ttcaaggggg ggggtgcagtc ttggcgggcc cccaggacgt
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 cccctccctc ttggctgggt ttgtccctct tctctttctc ttccttggaac acctgccaac
 420
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 444

<210> 2868

<211> 84

<212> PRT

<213> Homo sapiens

<400> 2868

Met	Leu	Phe	Ser	Leu	Lys	Tyr	Leu	Gly	Met	Thr	Leu	Val	Glu	Gln	Pro
1				5					10				15		
Lys	Gly	Glu	Glu	Leu	Ser	Ala	Ala	Ala	Ile	Lys	Arg	Ile	Val	Ala	Thr
		20						25					30		
Ala	Lys	Ala	Ser	Gly	Lys	Lys	Leu	Gln	Lys	Val	Thr	Leu	Lys	Val	Ser
		35					40					45			
Pro	Arg	Gly	Ile	Ile	Leu	His	Pro	Gly	His	His	Pro	Ala	Pro	Arg	Gln
		50				55					60				
His	Cys	Cys	His	Ser	Arg	Leu	Val	Ala	Ala	Ala	Pro	Arg	Pro	Cys	Trp
		65			70					75				80	
Trp	Cys	Trp	Arg												

<210> 2869

<211> 5811

<212> DNA

<213> Homo sapiens

<400> 2869

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 120
 cccccaaggc cactcacctc cccaactac ccaggacaaa ggatgcccag ccaaccacagc
 180
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 240
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<210> 2870

<211> 258

<212> PRT

<213> Homo sapiens

<400> 2870

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Pro	Ile	Lys	Ser	Asp	Leu	His	Ile	Lys	Asp	Asp	Pro	Asp	Gly	Ile	Pro
		20						25					30		
Ser	Lys	Arg	Phe	Lys	Thr	Met	Ser	Pro	Ser	Gln	Met	Ile	Met	Pro	Asn
		35					40				45				
Val	Met	Glu	Met	Ile	Ala	Ala	Leu	Gly	Pro	Gly	Pro	Ser	Pro	Tyr	Pro
	50					55				60					
Leu	Pro	Pro	Pro	Pro	Gly	Gly	Thr	Asn	Ser	Asn	Asp	Tyr	Ser	Ser	Gln
65				70					75					80	
Gly	Asn	Asn	Tyr	Gln	Gly	His	Gly	Asn	Phe	Asp	Phe	Pro	His	Gly	Asn
			85					90					95		
Pro	Gly	Gly	Thr	Ser	Met	Asn	Asp	Phe	Met	His	Gly	Pro	Pro	Gln	Leu
			100				105						110		
Ser	His	Pro	Pro	Asp	Met	Pro	Asn	Asn	Met	Ala	Ala	Leu	Glu	Lys	Pro
		115				120						125			
Leu	Ser	His	Pro	Met	Gln	Glu	Thr	Met	Pro	His	Ala	Gly	Ser	Ser	Asp
		130			135					140					
Gln	Pro	His	Pro	Ser	Ile	Gln	Gln	Gly	Leu	His	Val	Pro	His	Pro	Ser
145				150					155					160	
Ser	Gln	Ser	Gly	Pro	Pro	Leu	His	His	Ser	Gly	Ala	Pro	Pro	Pro	Pro
			165					170					175		
Pro	Ser	Gln	Pro	Pro	Arg	Gln	Pro	Pro	Gln	Ala	Ala	Pro	Ser	Ser	His
		180					185						190		
Pro	His	Ser	Asp	Leu	Thr	Phe	Asn	Pro	Ser	Ser	Ala	Leu	Gly	Gln	
		195					200					205			
Ala	Gly	Ala	Gln	Gly	Ala	Ser	Asp	Met	Pro	Glu	Pro	Ser	Leu	Asp	Leu
	210					215					220				
Leu	Pro	Glu	Leu	Thr	Asn	Pro	Asp	Glu	Leu	Leu	Ser	Tyr	Leu	Asp	Pro
225				230					235					240	
Pro	Asp	Leu	Pro	Ser	Asn	Ser	Asn	Asp	Asp	Leu	Leu	Ser	Leu	Phe	Glu
			245					250						255	

Asn Asn

<210> 2871

<211> 786

<212> DNA

<213> Homo sapiens

<400> 2871

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<211> 153

<212> PRT

<213> Homo sapiens

<400> 2872

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			20					25					30		
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Gln	His	Thr	Ser	Arg	Val	Leu	Gly	Ile	Glu	Leu	Leu	Glu	Gln	Ala	Val
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Glu	Asp	Ala	Arg	Trp	Thr	Ala	Ala	Phe	Asn	Gly	Ile	Thr	Asn	Ser	Glu
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Phe	His	Thr	Gly	Gln	Ala	Glu	Lys	Ile	Leu	Pro	Gly	Leu	Leu	Lys	Ser
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 <212> DNA
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<213> Homo sapiens

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 20          25          30
Lys Leu Lys Ala Ser Ser Arg Thr Ser Ala Leu Leu Ser Gly Phe Ala
 35          40          45
Met Val Ala Met Val Glu Val Gln Leu Asp Ala Asp His Asp Tyr Pro
 50          55          60
Pro Gly Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala
 65          70          75          80
Gly His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro Asn Ile
 85          90          95
Glu Ala Val Ser Asn Cys Thr Ile Ser Thr Arg Lys Glu Ser Pro His
100          105          110
Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe Ser Thr Val
115          120          125
Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp Val
130          135          140
Lys Phe Leu Pro Leu Lys Lys Gln Pro Gly Gln Pro Arg Pro Thr Ser
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Lys Pro Pro Ala Ser Gly Ala Ala Ala Asn Val Ser Thr Ser Gly Ile
165          170          175
Thr Pro Gly Gln Ala Ala Ala Ile Ala Ser Thr Thr Ile Met Val Pro
180          185          190
Phe Gly Leu Ile Phe Ile Val Phe Ala Val His Phe Tyr Arg Ser Leu
195          200          205
Val Ser His Lys Thr Asp Arg Gln Phe Gln Glu Leu Asn Glu Leu Ala
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<210> 2875

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<212> DNA

<213> Homo sapiens

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360

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<211> 193

<212> PRT

<213> Homo sapiens

<400> 2876

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 35 40 45
 Pro Gly Pro Lys Thr Val Thr Leu Lys Arg Thr Ser Gln Gly Phe Gly
 50 55 60
 Phe Thr Leu Arg His Phe Ile Val Tyr Pro Pro Glu Ser Ala Ile Gln
 65 70 75 80
 Phe Ser Tyr Lys Asp Glu Glu Asn Gly Asn Arg Gly Gly Lys Gln Arg
 85 90 95
 Asn Arg Leu Glu Pro Met Asp Thr Ile Phe Val Lys Gln Val Lys Glu
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 Gly Gly Pro Ala Phe Glu Ala Gly Leu Cys Thr Gly Asp Arg Ile Ile
 115 120 125
 Lys Val Asn Gly Glu Ser Val Ile Gly Lys Thr Tyr Ser Gln Val Ile
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 145 150 155 160
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<210> 2877

<211> 1921

<212> DNA

<213> Homo sapiens

<400> 2877

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<210> 2878

<211> 451

<212> PRT

<213> Homo sapiens

<400> 2878

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		20				25						30			
Thr	Glu	Glu	Gly	Lys	Glu	Val	Trp	Asp	Tyr	Val	Thr	Val	Arg	Lys	Asp
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Ser	Glu	Leu	Pro	Leu	Val	Met	Trp	Leu	Gln	Gly	Gly	Pro	Gly	Gly	Ser
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Ser	Thr	Gly	Phe	Gly	Asn	Phe	Glu	Glu	Ile	Gly	Pro	Leu	Asp	Ser	Asp
		85							90					95	
Leu	Lys	Pro	Arg	Lys	Thr	Thr	Trp	Leu	Gln	Ala	Ala	Ser	Leu	Leu	Phe
		100						105					110		
Val	Asp	Asn	Pro	Val	Gly	Thr	Gly	Phe	Ser	Tyr	Val	Asn	Gly	Ser	Gly
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Ala	Tyr	Ala	Lys	Asp	Leu	Ala	Met	Val	Ala	Ser	Asp	Met	Met	Val	Leu
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Leu	Lys	Thr	Phe	Phe	Ser	Cys	His	Lys	Glu	Phe	Gln	Thr	Val	Pro	Phe
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Tyr	Ile	Phe	Ser	Glu	Ser	Tyr	Gly	Gly	Lys	Met	Ala	Ala	Gly	Ile	Gly
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						295					300				
Arg	Asp	Ala	Leu	Ser	Gln	Leu	Met	Asn	Gly	Pro	Ile	Arg	Lys	Lys	Leu
						310				315					320
Lys	Ile	Ile	Pro	Glu	Asp	Gln	Ser	Trp	Gly	Gly	Gln	Ala	Thr	Asn	Val

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Asp Thr Leu Leu Glu Ala Gly Val Asn Val Thr Val Tyr Asn Gly Gln					
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Leu Asp Leu Ile Val Asp Thr Ile Gly Gln Glu Ala Trp Val Arg Lys					
	370		375		380
Leu Lys Trp Pro Glu Leu Ser Arg Phe Asn Gln Leu Lys Trp Lys Ala					
	385		390		400
Leu Tyr Ser Asp Pro Lys Ser Leu Glu Thr Ser Ala Phe Val Lys Ser					
	405		410		415
Tyr Lys Asn Leu Ala Phe Tyr Trp Ile Leu Lys Ala Gly His Met Val					
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<210> 2879

<211> 1352

<212> DNA

<213> Homo sapiens

<400> 2879

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<211> 376

<212> PRT

<213> Homo sapiens

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			20					25					30		
Leu	Ile	Gln	Pro	Ala	Asn	His	Val	Leu	Pro	Ala	Ser	Phe	Gly	Asn	Ser
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	50					55					60				
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<211> 3021

<212> DNA

<213> Homo sapiens

<400> 2881

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<210> 2882

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2882

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 20 25 30
 Val His Pro Gln His Phe Leu Arg Lys Arg Thr Pro Ala Gln Ala Gly
 35 40 45
 Pro Ala Ile Ser Pro Leu Pro Thr Asp Ser Gln Ser Pro Leu Ala Ser
 50 55 60
 Pro Leu Asp Val Ser Gly Gln Gly Ser Gly Gly Cys Ser Phe Asp Lys
 65 70 75 80
 Lys Lys Lys Lys Phe Tyr Val Phe Lys Leu Leu Leu Gln Asp Phe Asn
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<210> 2883

<211> 516

<212> DNA

<213> Homo sapiens

<400> 2883

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<210> 2884

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2884

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Leu	Arg	Gly	Cys	Tyr	His	Glu	Gly	Pro	Ala	Gly	Gly	Ala	Ala	Ala	Ala
			20					25					30		
Pro	Ser	Ser	Val	Asp	Thr	Tyr	Pro	Tyr	Gly	Leu	Pro	Thr	Pro	Pro	Glu
			35					40					45		
Met	Ser	Pro	Leu	Asp	Val	Leu	Glu	Pro	Glu	Gln	Thr	Phe	Phe	Ser	Ser
			50				55				60				
Pro	Cys	Gln	Glu	Glu	His	Gly	His	Pro	Arg	Arg	Ile	Pro	His	Leu	Pro
					70				75					80	
Gly	His	Pro	Tyr	Ser	Pro	Glu	Tyr	Ala	Pro	Ser	Pro	Leu	His	Cys	Ser
				85					90					95	
His	Pro	Leu	Gly	Ser	Leu	Ala	Leu	Gly	Gln	Ser	Pro	Gly	Val	Ser	Met
			100					105					110		
Met	Ser	Pro	Val	Pro	Gly	Cys	Pro	Pro	Ser	Pro	Ala	Tyr	Tyr	Ser	Pro
			115				120					125			
Ala	Thr	Tyr	His	Pro	Leu	His	Ser	Asn	Leu	Gln	Ala	His	Leu	Gly	Gln
			130				135				140				
Leu	Ser	Pro	Pro	Pro	Glu	His	Pro	Gly	Phe	Asp	Ala	Leu	Asp	Gln	Leu
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Asn	Gln	Gly	Glu	Leu	Leu	Gly	Asp	Met	Asp	Arg	Asn				
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<210> 2885

<211> 807

<212> DNA

<213> Homo sapiens

<400> 2885

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 gacaatgccca ataaaacctg caagatgatg ttagccacag aagaaacctc tctgacctt
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 420
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 cttattcaga gtgctgccaa aagcactagc actcagggct tggagcatga cctggatgat
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 660
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<210> 2886

<211> 269

<212> PRT

<213> Homo sapiens

<400> 2886

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Ser	Gln	Phe	Ala	Glu	Phe	Asp	Asp	Glu	Leu	Asp	Ser	Met	Ala	Pro	Val
			20					25					30		
Gly	Arg	Asp	Ala	Glu	Thr	Leu	Gln	Lys	Gln	Lys	Glu	Thr	Ile	Lys	Ala
		35					40						45		
Phe	Leu	Lys	Lys	Leu	Glu	Ala	Leu	Ile	Ala	Ser	Asn	Asp	Asn	Ala	Asn
		50				55					60				
Lys	Thr	Cys	Lys	Met	Met	Leu	Ala	Thr	Glu	Glu	Thr	Ser	Pro	Asp	Leu
65					70				75					80	
Val	Gly	Ile	Lys	Arg	Asp	Leu	Glu	Ala	Leu	Ser	Lys	Gln	Cys	Asn	Lys
			85					90						95	
Leu	Leu	Asp	Arg	Ala	Gln	Ala	Arg	Glu	Glu	Gln	Val	Glu	Gly	Thr	Ile
		100					105						110		
Lys	Arg	Leu	Glu	Glu	Phe	Tyr	Ser	Lys	Leu	Lys	Glu	Phe	Ser	Ile	Leu
		115				120					125				
Leu	Gln	Lys	Ala	Glu	Glu	His	Glu	Glu	Ser	Gln	Gly	Pro	Val	Gly	Met
		130				135					140				
Glu	Thr	Glu	Thr	Ile	Asn	Gln	Gln	Leu	Asn	Met	Phe	Lys	Val	Phe	Gln
145				150					155					160	
Lys	Glu	Glu	Ile	Glu	Pro	Leu	Gln	Gly	Lys	Gln	Gln	Asp	Val	Asn	Trp
			165					170						175	
Leu	Gly	Gln	Gly	Leu	Ile	Gln	Ser	Ala	Ala	Lys	Ser	Thr	Ser	Thr	Gln
		180					185						190		
Gly	Leu	Glu	His	Asp	Leu	Asp	Asp	Val	Asn	Ala	Arg	Trp	Lys	Thr	Leu
		195				200					205				
Asn	Lys	Lys	Val	Ala	Gln	Arg	Ala	Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu
		210			215					220					
His	Cys	Gly	Arg	Phe	Gln	Asp	Ala	Leu	Glu	Ser	Leu	Leu	Ser	Trp	Met

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 1920
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<210> 2888

<211> 315

<212> PRT

<213> Homo sapiens

<400> 2888

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 35 40 45
 Thr Ser Thr Lys Ser Thr Arg Thr Ser Ala Arg Pro Gly Leu Thr Ala
 50 55 60
 Thr Val Ser Ile Gly Leu Ser Asp Ser Pro Thr Trp Arg His Cys Trp
 65 70 75 80
 Met Thr Ala Arg Ser Cys Ser Gly Glu Lys Gly Gly His Trp Ala Pro
 85 90 95
 Arg Gln Val Gly Val Tyr Leu Leu Pro Gly Arg Val Gly Cys Val Ser
 100 105 110
 Ser Arg Val Ser Pro Ser Phe Pro Gly Asp Gly Leu Asp Ser Gly Leu
 115 120 125
 Ala Arg Arg Gly Ser Ala Val Ser Ala Leu Ala Ser Gly Leu Val Glu
 130 135 140
 Glu Pro Met Leu Gly Pro Pro Phe His Pro Thr Pro Arg Phe Lys Ala
 145 150 155 160
 Val Ser Ala Lys Ser Lys Glu Asp Leu Val Ser Gln Gly Phe Thr Glu
 165 170 175
 Phe Thr Ile Glu Asp Phe His Asn Thr Phe Met Asp Leu Ile Glu Gln

Val	Glu	Lys	Gln	Thr	Ser	Val	Ala	Asp	Leu	Leu	Ala	Ser	Phe	Asn	Asp
		195					200					205			
Gln	Ser	Thr	Ser	Asp	Tyr	Leu	Val	Val	Tyr	Leu	Arg	Leu	Leu	Thr	Ser
		210					215					220			
Gly	Tyr	Leu	Gln	Arg	Glu	Ser	Lys	Phe	Phe	Glu	His	Phe	Ile	Glu	Gly
		225				230					235				240
Gly	Arg	Thr	Val	Lys	Glu	Phe	Cys	Gln	Gln	Glu	Val	Glu	Pro	Met	Cys
				245						250				255	
Lys	Glu	Ser	Asp	His	Ile	His	Ile	Ile	Ala	Leu	Ala	Gln	Ala	Leu	Ser
			260						265					270	
Val	Ser	Ile	Gln	Val	Glu	Tyr	Met	Asp	Arg	Gly	Glu	Gly	Gly	Thr	Thr
		275					280						285		
Asn	Pro	His	Ile	Phe	Pro	Glu	Gly	Ser	Glu	Pro	Lys	Val	Tyr	Leu	Leu
		290					295				300				
Tyr	Arg	Pro	Gly	His	Tyr	Asp	Ile	Leu	Tyr	Lys					
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<210> 2889
<211> 614
<212> DNA
<213> Homo sapiens
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614

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<210> 2890
<211> 204
<212> PRT
<213> Homo sapiens
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<400> 2890
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Pro Glu Val	Lys Leu Pro Arg Ala	Pro Glu Val Gln Leu	Lys Ala Thr
	35	40	45
Lys Ala Glu	Gln Ala Glu Gly Met	Glu Phe Gly Phe Lys	Met Pro Lys
	50	55	60
Met Thr Met	Pro Lys Leu Gly Arg Ala	Glu Ser Pro Ser Arg	Gly Lys
	65	70	75
Pro Gly Glu	Ala Gly Ala Glu Val	Ser Gly Lys Leu Val	Thr Leu Pro
	85	90	95
Cys Leu Gln	Pro Glu Val Asp Gly	Glu Ala His Val Gly	Val Pro Ser
	100	105	110
Leu Thr Leu	Pro Ser Val Glu Leu	Asp Leu Pro Gly	Ala Leu Gly
	115	120	125
Gln Gly Gln	Val Pro Ala Ala Lys	Met Gly Lys Gly	Glu Arg Ala Glu
	130	135	140
Gly Pro Glu	Val Ala Ala Gly	Val Arg Glu	Val Phe Arg
	145	150	155
Ser Val Glu	Ile Val Thr Pro	Gln Leu Pro Ala	Val Glu Ile
	165	170	175
Gly Arg Leu	Glu Met Ile Glu Thr	Lys Val Lys Pro	Ser Ser Lys
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Ser Leu Pro	Lys Phe Gly Leu Ser	Gly Pro Lys Val	
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<210> 2891

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2891

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<210> 2892

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2892

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Arg Leu Cys Arg Ala Leu Ser Lys Thr Pro Leu Gln His Gln Leu His
      20             25             30
Ser Thr Ser Tyr Arg Lys Ala Leu Pro Ile Leu Arg Pro Ser Ser Arg
      35             40             45
Arg Glu Ala Gly Pro Leu His His Ile Asp Leu Arg Arg Cys Phe Ser
 50             55             60
Arg Leu Gly Arg Gly Ala Asp Phe Ala Val Cys Ala Lys Glu Pro Val
65             70             75             80
Ser Asp Asn Pro Ile Phe Leu Leu Ile Thr
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<210> 2893

<211> 2270

<212> DNA

<213> Homo sapiens

<400> 2893

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<210> 2894

<211> 490

<212> PRT

<213> Homo sapiens

<400> 2894

Met Phe Ile Ser Leu Gly Gly Ala Pro Asp Arg Gln Ser Leu Phe Pro

1	5	10	15
Gln Leu Gly	Gly Gly Ser Gly Gly	Ser Ala Arg Gly Tyr	Cys Arg
	20	25	30
Gln Val Ser	Val Ser Leu His	Pro Gly Thr Gly Leu	Phe Ser Pro Phe
	35	40	45
Cys Ser Val	Pro Leu Trp Cys Ile Tyr	Phe Leu Ser Phe Cys	Ile Val
	50	55	60
Leu Ser Leu	Pro Ser Ala Ser Leu His	Leu Cys Leu Ser Cys	Leu His
	65	70	75
Phe Leu Asn	Leu Asp Cys Pro Cys Leu	Phe Leu Cys His Ser	Leu Ser
	85	90	95
Ser Pro Ser	Val Cys Gly Ser Ala Ser	Leu Ser His Ser Pro	Tyr Asn
	100	105	110
Trp Pro Leu	Pro Ala Gln Thr Phe Leu	Asp Glu Leu His Glu	Thr Gly
	115	120	125
Gln Leu His	Ser Met Ser Thr Trp Met	Glu Leu Tyr Pro Ala	Val Ser
	130	135	140
Thr Asp Val	Arg Phe Ala Asn Met Leu	Gly Gln Pro Gly Ser	Thr Pro
	145	150	155
Leu Asp Leu	Phe Lys Phe Tyr Val Glu	Glu Leu Lys Ala Arg	Phe His
	165	170	175
Asp Glu Lys	Lys Ile Ile Lys Asp Ile	Leu Lys Asp Arg Gly	Phe Cys
	180	185	190
Val Glu Val	Asn Thr Ala Phe Glu Asp	Phe Ala His Val Ile	Ser Phe
	195	200	205
Asp Lys Arg	Ala Ala Ala Leu Asp	Ala Gly Asn Ile Lys	Leu Thr Phe
	210	215	220
Asn Ser Leu	Leu Glu Lys Ala Glu Ala	Arg Glu Arg Glu Arg	Glu Lys
	225	230	235
Glu Glu Ala	Arg Arg Met Arg Arg Arg	Glu Ala Ala Phe Arg	Ser Met
	245	250	255
Leu Arg Gln	Ala Val Pro Ala Leu Glu	Leu Gly Thr Ala Trp	Glu Glu
	260	265	270
Val Arg Glu	Arg Phe Val Cys Asp Ser	Ala Phe Glu Gln Ile	Thr Leu
	275	280	285
Glu Ser Glu	Arg Ile Arg Leu Phe Arg	Glu Phe Leu Gln Val	Leu Glu
	290	295	300
Thr Glu Cys	Gln His Leu His Thr Lys	Gly Arg Lys His Gly	Arg Lys
	305	310	315
Gly Lys Lys	His His His Lys Arg Ser	His Ser Pro Ser Gly	Ser Glu
	325	330	335
Ser Glu Glu	Glu Glu Leu Pro Pro Pro	Ser Leu Arg Pro Pro	Lys Arg
	340	345	350
Arg Arg Arg	Asn Pro Ser Glu Ser Gly	Ser Glu Pro Ser Ser	Ser Leu
	355	360	365
Asp Ser Val	Glu Ser Gly Gly Ala Ala	Leu Gly Gly Arg Gly	Ser Pro
	370	375	380
Ser Ser His	Leu Leu Gly Ala Asp His	Gly Leu Arg Lys Ala	Lys Lys
	385	390	395
Pro Lys Lys	Lys Thr Lys Lys Arg Arg	His Lys Ser Asn Ser	Pro Glu
	405	410	415
Ser Glu Thr	Asp Pro Glu Glu Lys Ala	Gly Lys Glu Ser Asp	Glu Lys
	420	425	430
Glu Gln Glu	Gln Asp Lys Asp Arg Glu	Leu Gln Gln Ala Glu	Leu Pro

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          435              440              445
Asn Arg Ser Pro Gly Phe Gly Ile Lys Lys Glu Lys Thr Gly Trp Asp
   450              455              460
Thr Ser Glu Ser Glu Leu Ser Glu Gly Glu Leu Glu Arg Arg Arg Arg
   465              470              475              480
Thr Leu Leu Gln Gln Leu Asp Asp His Gln
          485              490

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<210> 2895
 <211> 697
 <212> DNA
 <213> Homo sapiens

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<400> 2895
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120
tgcaggcggg agcacgtctc cagcatcaac ctgaagtcg ccacgaactc ggtgatgccc
180
ccgtactggc cgctggcgaa cttctcttcc atctgcagca gacacatgcc ctgtccgggc
240
tgctgcggga aggcgcgacc gcccgcgccc ccgctgcgcg gcccttctgc cacctcctcc
300
tgccgcgggt gcaacgcccc ccaagggctg cagaagggg gcggtgaggc cccggtgctt
360
ctcctgcagg aactcgcccc ggatgcggta gcccttctg tagctcgtag gtcagctcct
420
gtccttgcga gcaaccgcct ccgatcccca tcgcctccat ctcttcttcc tgatcgtccg
480
cgctctccag cgaggaggca ctccttccgt gggccggccc tgagggtctgg gccccgctg
540
ccacctcttc ctctgtcttc tctctctcgg ccgcgcgtgg cggcgctctt tcctccccag
600
ccggctccat cgctccgggc gtcccgggca cactcatgcc ccggcaggcc taggctgggc
660
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697

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<210> 2896
 <211> 174
 <212> PRT
 <213> Homo sapiens

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<400> 2896
Met Pro Pro Tyr Trp Pro Leu Ala Asn Phe Ser Ser Ile Cys Ser Arg
  1           5           10           15
His Met Pro Cys Pro Gly Cys Cys Gly Lys Ala Arg Pro Pro Arg Pro
    20           25           30
Pro Leu Arg Gly Pro Ser Ala Thr Ser Ser Cys Arg Gly Gly Asn Ala
    35           40           45
Pro Gln Gly Leu Gln Lys Gly Gly Glu Ala Pro Val Leu Leu Leu
    50           55           60
Gln Glu Leu Ala Gln Asp Ala Val Ala Pro Ala Val Ala Arg Arg Ser

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65		70		75		80									
Ala	Pro	Ala	Pro	Cys	Ser	Asn	Arg	Leu	Arg	Ser	Pro	Ser	Pro	Pro	Ser
				85				90						95	
Leu	Pro	Pro	Asp	Arg	Pro	Arg	Pro	Pro	Ala	Arg	Arg	His	Ser	Phe	Arg
			100					105					110		
Gly	Pro	Ala	Leu	Arg	Ser	Gly	Pro	Pro	Leu	Pro	Pro	Pro	Pro	Arg	Arg
		115					120					125			
Pro	Leu	Leu	Arg	Pro	Pro	Val	Ala	Ala	Ala	Leu	Pro	Pro	Gln	Pro	Ala
		130				135					140				
Pro	Ser	Leu	Pro	Ala	Ser	Arg	Ala	His	Ser	Cys	Pro	Gly	Arg	Pro	Arg
		145			150					155				160	
Leu	Gly	Gly	Val	Glu	Gln	Pro	Leu	Glu	Val	Leu	Gly	Asp	Ala		
			165					170							

<210> 2897

<211> 3184

<212> DNA

<213> Homo sapiens

<400> 2897

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120
ctataattgt atgagaagaa taaaaacagt tcctttagaa ttctatttgt ttctctatt
180
ctttttcagg ctaagacaat gcatagcttt tgggtgtatc aggtaaccct ggttaccact
240
aaagggtgat ccccttcaga taataaaccc atttaactcc agtctcactc ccttcaccag
300
gagggcgact cacagtcage ttggtggtga tgggggtttt gctgccagat gggtttccct
360
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420
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480
aggggatgat tatgctgtac ccggctcgga tcgagaaggg accttggggc ttgggaggca
540
gagccattcc aaagaggggg atgatatact ctccacctgc gacgcatgat aggatcagga
600
tgcccttggt ctacccagg ttggtgggct cgaataagac ttccacactg gcttcagtgc
660
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720
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780
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840
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900
aggtttctcc agctttcagg ggctgaaatt caaatgagaa cgtgccctcg gagttggcag
960
gcaccacaaa ctgggagggc agggcgatgt cgggcatccg gcattccgtg gagaaggtca
1020

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1080
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1140
acaagaactc atttgtcacc tcgtttcggga agatcacctt tgcacgctac gttccctcct
1200
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1680
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1740
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tctcctttcc caccctcggtg ggatggtagg tcaacttcaa agaaacctcc atgcctgagg
1860
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1980
gatacaccac ggggtccaaag ggaatatgtt cctgggtccag tgagatctcc agggcctggc
2040
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2100
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2160
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2280
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2640

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 agcc
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<210> 2898

<211> 933

<212> PRT

<213> Homo sapiens

<400> 2898

Met	Asn	Val	Glu	Ile	Lys	Cys	Lys	Asp	Arg	Thr	Gly	Ser	Ile	Thr	Leu
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Leu	Thr	Pro	Asn	Gln	Thr	Asn	Ile	Ile	Asn	Phe	Tyr	Glu	Val	Glu	Leu
			20					25					30		
Asn	Glu	Cys	Val	Gln	Cys	Glu	Phe	Asn	Phe	Ile	Asn	Thr	Gly	Lys	Phe
		35					40					45			
Thr	Phe	Ser	Phe	Gln	Ala	Gln	Leu	Cys	Gly	Ser	Lys	Thr	Leu	Leu	Gln
		50				55					60				
Tyr	Leu	Glu	Phe	Ser	Pro	Ile	Asp	Ser	Thr	Val	Asp	Val	Gly	Gln	Ser
65				70						75				80	
Val	His	Ala	Thr	Leu	Ser	Phe	Gln	Pro	Leu	Lys	Lys	Cys	Val	Leu	Thr
			85					90					95		
Asp	Leu	Glu	Leu	Ile	Ile	Lys	Ile	Ser	His	Gly	Pro	Thr	Phe	Met	Cys
			100					105					110		
Asn	Ile	Ser	Gly	Cys	Ala	Val	Ser	Pro	Ala	Ile	His	Phe	Ser	Phe	Thr
		115				120						125			
Ser	Tyr	Asn	Phe	Gly	Thr	Cys	Phe	Ile	Tyr	Gln	Ala	Gly	Met	Pro	Pro
	130					135					140				
Tyr	Lys	Gln	Thr	Leu	Val	Ile	Thr	Asn	Lys	Glu	Glu	Thr	Pro	Met	Ser
145				150						155				160	
Ile	Asp	Cys	Leu	Tyr	Thr	Asn	Thr	Thr	His	Leu	Glu	Val	Asn	Ser	Arg
			165					170					175		
Val	Asp	Val	Val	Lys	Pro	Gly	Asn	Thr	Leu	Glu	Ile	Pro	Ile	Thr	Phe
		180						185					190		
Tyr	Pro	Arg	Glu	Ser	Ile	Asn	Tyr	Gln	Glu	Leu	Ile	Pro	Phe	Glu	Ile
		195				200						205			
Asn	Gly	Leu	Ser	Gln	Gln	Thr	Val	Glu	Ile	Lys	Gly	Lys	Gly	Thr	Glu

210	215	220
Met Lys Ile Leu Val Leu Asp Pro Ala Asn Arg Ile Val Lys Leu Gly		
225	230	235
Ala Val Leu Pro Gly Gln Val Val Lys Arg Thr Val Ser Ile Met Asn		240
	245	250
Asn Ser Leu Ala Gln Leu Thr Phe Asn Gln Ser Ile Leu Phe Thr Ile		255
	260	265
Pro Glu Leu Gln Glu Pro Lys Val Leu Thr Leu Ala Pro Phe His Asn		270
	275	280
Ile Thr Leu Lys Pro Lys Glu Val Cys Lys Leu Glu Val Ile Phe Ala		285
	290	295
Pro Lys Lys Arg Val Pro Pro Phe Ser Glu Glu Val Phe Met Glu Cys		300
305	310	315
Met Gly Leu Leu Arg Pro Leu Phe Leu Leu Ser Gly Cys Cys Gln Ala		320
	325	330
Leu Glu Ile Ser Leu Asp Gln Glu His Ile Pro Phe Gly Pro Val Val		335
	340	345
Tyr Gln Thr Gln Ala Thr Arg Arg Ile Leu Met Leu Asn Thr Gly Asp		350
	355	360
Val Gly Ala Arg Phe Lys Trp Asp Ile Lys Lys Phe Glu Pro His Phe		365
	370	375
Ser Ile Ser Pro Glu Glu Gly Tyr Ile Thr Ser Gly Met Glu Val Ser		380
385	390	395
Phe Glu Val Thr Tyr His Pro Thr Glu Val Gly Lys Glu Ser Leu Cys		400
	405	410
Lys Asn Ile Leu Cys Tyr Ile Gln Gly Gly Ser Pro Leu Ser Leu Thr		415
	420	425
Leu Ser Gly Val Cys Val Gly Pro Pro Ala Val Lys Glu Val Val Asn		430
	435	440
Phe Thr Cys Gln Val Arg Ser Lys His Thr Gln Thr Ile Leu Leu Ser		445
	450	455
Asn Arg Thr Asn Gln Thr Trp Asn Leu His Pro Ile Phe Glu Gly Glu		460
465	470	475
His Trp Glu Gly Pro Glu Phe Ile Thr Leu Glu Ala His Gln Gln Asn		480
	485	490
Lys Pro Tyr Glu Ile Thr Tyr Arg Pro Arg Thr Met Asn Leu Glu Asn		495
	500	505
Arg Lys His Gln Gly Thr Leu Phe Phe Pro Leu Pro Asp Gly Thr Gly		510
	515	520
Trp Leu Tyr Ala Leu His Gly Thr Ser Glu Leu Pro Lys Ala Val Ala		525
	530	535
Asn Ile Tyr Arg Glu Val Pro Cys Lys Thr Pro Tyr Thr Glu Leu Leu		540
545	550	555
Pro Ile Thr Asn Trp Leu Asn Lys Pro Gln Arg Phe Arg Val Ile Val		560
	565	570
Glu Ile Leu Lys Pro Glu Lys Pro Asp Leu Ser Ile Thr Met Lys Gly		575
	580	585
Leu Asp Tyr Ile Asp Val Leu Ser Gly Ser Lys Lys Asp Tyr Lys Leu		590
	595	600
Asn Phe Phe Ser His Lys Glu Gly Thr Tyr Ala Ala Lys Val Ile Phe		605
	610	615
Arg Asn Glu Val Thr Asn Glu Phe Leu Tyr Tyr Asn Val Ser Phe Arg		620
625	630	635
Val Ile Pro Ser Gly Ile Ile Lys Thr Ile Glu Met Val Thr Pro Val		640

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        645                650                655
Arg Gln Val Ala Ser Ala Ser Ile Lys Leu Glu Asn Pro Leu Pro Tyr
        660                665                670
Ser Val Thr Phe Ser Thr Glu Cys Arg Met Pro Asp Ile Ala Leu Pro
        675                680                685
Ser Gln Phe Val Val Pro Ala Asn Ser Glu Gly Thr Phe Ser Phe Glu
        690                695                700
Phe Gln Pro Leu Lys Ala Gly Glu Thr Phe Gly Arg Leu Thr Leu His
        705                710                715                720
Asn Thr Asp Leu Gly Tyr Tyr Gln Tyr Glu Leu Tyr Leu Lys Ala Thr
        725                730                735
Pro Ala Leu Pro Glu Lys Pro Val His Phe Gln Thr Val Leu Gly Ser
        740                745                750
Ser Gln Ile Ile Leu Val Lys Phe Ile Asn Tyr Thr Arg Ala Arg Thr
        755                760                765
Glu Tyr Tyr Cys Arg Thr Asp Cys Thr Asp Phe His Ala Glu Lys Leu
        770                775                780
Ile Asn Ala Ala Pro Gly Gly Gln Gly Gly Thr Glu Ala Ser Val Glu
        785                790                795                800
Val Leu Phe Glu Pro Ser His Leu Gly Glu Thr Lys Gly Ile Leu Ile
        805                810                815
Leu Ser Ser Leu Ala Gly Gly Glu Tyr Ile Ile Pro Leu Phe Gly Met
        820                825                830
Ala Leu Pro Pro Lys Pro Gln Gly Pro Phe Ser Ile Arg Ala Gly Tyr
        835                840                845
Ser Ile Ile Ile Pro Phe Lys Asn Val Phe Tyr His Met Val Thr Phe
        850                855                860
Ser Ile Ile Val Asp Asn Pro Ala Phe Thr Ile Arg Ala Gly Glu Ser
        865                870                875                880
Val Arg Pro Lys Lys Ile Asn Asn Ile Thr Val Ser Phe Glu Gly Asn
        885                890                895
Pro Ser Gly Ser Lys Thr Pro Ile Thr Thr Lys Leu Thr Val Ser Cys
        900                905                910
Pro Pro Gly Glu Gly Ser Glu Thr Gly Val Lys Trp Val Tyr Tyr Leu
        915                920                925
Lys Gly Ile Thr Leu
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<210> 2899

<211> 876

<212> DNA

<213> Homo sapiens

<400> 2899

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120
gagctgcact gccgaatgtc gtagccacta gccacatagg ctgttgattg cttgaaatgt
180
gactagtctg aattgagaaa tactcccaac aggggcacaa aacgtccccg ggatgatgag
240
gaagaagaac tgaagacacg ccgcaagcaa actggtactc gagaacgcgg ccgctatcgg
300

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gaagaagaaa tgactgtggt ggaggaagcg gatgatgaca aaaaaaggct gctgcagatt
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 420
 aagaaaatga tcctcacatt tgaaaagaga tcatataaaa accaagaatt gcggaattaag
 480
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 540
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<210> 2900

<211> 189

<212> PRT

<213> Homo sapiens

<400> 2900

Met	Thr	Val	Val	Glu	Ala	Asp	Asp	Asp	Lys	Lys	Arg	Leu	Leu	Gln
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Ile	Ile	Asp	Arg	Asp	Gly	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Pro	Leu
		20					25					30		
Asp	Glu	Ser	Ser	Val	Lys	Lys	Met	Ile	Leu	Thr	Phe	Glu	Lys	Arg
	35						40					45		Ser
Tyr	Lys	Asn	Gln	Glu	Leu	Arg	Ile	Lys	Phe	Pro	Asp	Asn	Pro	Glu
	50					55				60				Lys
Phe	Met	Glu	Ser	Glu	Leu	Asp	Leu	Asn	Asp	Ile	Ile	Gln	Glu	Met
65					70				75					80
Val	Val	Ala	Thr	Met	Pro	Asp	Leu	Tyr	His	Leu	Leu	Val	Glu	Leu
			85					90					95	Asn
Ala	Val	Gln	Ser	Leu	Leu	Gly	Leu	Leu	Gly	His	Asp	Asn	Thr	Asp
		100					105					110		Val
Ser	Ile	Ala	Val	Val	Asp	Leu	Leu	Gln	Glu	Leu	Thr	Asp	Ile	Asp
	115					120					125			Thr
Leu	His	Glu	Ser	Glu	Glu	Gly	Ala	Glu	Val	Leu	Ile	Asp	Ala	Leu
130						135					140			Val
Asp	Gly	Gln	Val	Val	Ala	Leu	Leu	Val	Gln	Asn	Leu	Glu	Arg	Leu
145					150					155				160
Glu	Ser	Val	Lys	Glu	Glu	Ala	Asp	Gly	Val	His	Asn	Thr	Leu	Ala
			165					170					175	Ile
Val	Glu	Asn	Met	Ala	Glu	Phe	Arg	Pro	Glu	Met	Cys	Thr		
		180						185						

<210> 2901

<211> 756

<212> DNA

<213> Homo sapiens

<400> 2901

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 120
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 180
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 240
 ctctttggcc cgggcaggaa gctgtctcca caggaccctt cggaggagct gtcacccatg
 300
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 420
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 480
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 600
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 660
 agaactttgt gtgcacaacc agtctttctt ttcacaatca tattttaaca gtttatgtaa
 720
 agaataatta aattatataa ttgccagggc aaaaaa
 756

<210> 2902

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2902

Thr	Arg	Arg	Arg	Gly	Ala	Phe	Asp	Phe	Phe	Glu	Lys	Gln	Asp	Gln	Val
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Ala	Glu	Glu	Gly	Pro	Pro	Val	Gln	Ser	Leu	Lys	Gly	Glu	Asp	Ala	Glu
			20					25					30		
Glu	Ser	Leu	Glu	Glu	Glu	Ala	Leu	Asp	Pro	Leu	Gly	Ile	Met	Arg	
			35				40					45			
Ser	Lys	Lys	Pro	Lys	Lys	His	Pro	Lys	Val	Ala	Val	Lys	Ala	Lys	Pro
			50			55					60				
Ser	Pro	Arg	Leu	Thr	Ile	Phe	Asp	Glu	Glu	Val	Asp	Pro	Asp	Glu	Gly
					70					75				80	
Leu	Phe	Gly	Pro	Gly	Arg	Lys	Leu	Ser	Pro	Gln	Asp	Pro	Ser	Glu	Asp
				85					90					95	
Val	Ser	Ser	Met	Asp	Pro	Leu	Lys	Leu	Phe	Asp	Asp	Pro	Asp	Leu	Gly
			100					105						110	
Gly	Ala	Ile	Pro	Leu	Gly	Asp	Ser	Leu	Leu	Leu	Pro	Ala	Ala	Cys	Glu
			115			120					125				
Ser	Gly	Gly	Pro	Thr	Pro	Ser	Leu	Ser	His	Arg	Asp	Ala	Ser	Lys	Glu

130 135 140
 Leu Phe Arg Tyr His Leu Ser Pro Ala Ala Leu Gly Gln Leu
 145 150 155

<210> 2903

<211> 542

<212> DNA

<213> Homo sapiens

<400> 2903

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 accacctatt tctctgggaa ttgtaccatg gaagatgcc aattggccca ggactttctg
 120
 gactcacaga acctcagtgc ctacaacacc cggtcttca aagaggtcga tggagaaggg
 180
 aagccctact acgagggtcg gctggcttct gtgcttggtt cagagccttc cctggactct
 240
 gaggtgactt ccaagctgaa gagctatgaa ttccggggaa gccctttcca ggtgaccggg
 300
 ggggactacg cgcccatcct ccagaagggtg gtggagcagc tggagaaagc caaggcctat
 360
 gcagccaaca gccaccagggt gcagatgctg gccaggtata tagagagctt caccaggggc
 420
 tccatcgagg ccacaagag gggctccgcg ttctggatcc aggacaaag ccccatcgt
 480
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 540
 gt
 542

<210> 2904

<211> 180

<212> PRT

<213> Homo sapiens

<400> 2904

Lys Leu Met Phe Ser Leu Tyr Pro Arg Leu Arg His Leu Gly Leu Gly
 1 5 10 15
 Lys Glu Gly Ile Thr Thr Tyr Phe Ser Gly Asn Cys Thr Met Glu Asp
 20 25 30
 Ala Lys Leu Ala Gln Asp Phe Leu Asp Ser Gln Asn Leu Ser Ala Tyr
 35 40 45
 Asn Thr Arg Leu Phe Lys Glu Val Asp Gly Glu Gly Lys Pro Tyr Tyr
 50 55 60
 Glu Val Arg Leu Ala Ser Val Leu Gly Ser Glu Pro Ser Leu Asp Ser
 65 70 75 80
 Glu Val Thr Ser Lys Leu Lys Ser Tyr Glu Phe Arg Gly Ser Pro Phe
 85 90 95
 Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln Lys Val Val Glu
 100 105 110
 Gln Leu Glu Lys Ala Lys Ala Tyr Ala Ala Asn Ser His Gln Gly Gln
 115 120 125
 Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu Ala

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      130                135                140
His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro His Arg
145                150                155                160
Gly Glu Val Arg Arg Gln Leu His Pro Thr Cys Pro Leu Leu Pro Ala
      165                170                175
Pro Pro Ser Arg
      180

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<210> 2905
<211> 814
<212> DNA
<213> Homo sapiens

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<400> 2905
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gtcacaaagt ccttcttctg tattacaaat tctgccactt tgttcagaa ctgggtatca
120
ggattctctc tctgcccagg tttctgctgt ccccccaaaa gaaagacatg tagctgggca
180
tggtgggtaca catctgtggt ccagtttact caggaggctg aggaggagg attgcttgag
240
cccagtggtt caaggttgca gtgggctgtg aatgctctac ttcactccag cctgagcaac
300
agagcaagac ccggccctc ttctcgactt tctatccctc ctctcaaca ccttttctt
360
ctggaaatgt gcttcggggt ggttaaccaa gccagggaa acttgcgtgg ccagcatct
420
tccgtccgct gcaggaggag cacacgccc cgcccggtt cagcaagacg cgagaaagcg
480
gccacgccgg gcgtccggga gctgaggctg gagggcgctt ggcaggcagg gcggggccca
540
ggcggcgagg gtgcttatga ccggcgctgg ggggaacttc tggagctcaa ggggccacta
600
taaaagcgga cagtcttgag ccttcgtctt tcacctaaagt cagtgcgcgc ccttcgcaa
660
gcctctgtgg aggtaacat tgggggttcg cctccaaatc caggaaatgca cctcaaaaat
720
gtcctctacac cgtaagaccg tgctcttcaa tgcaaaaggg actgtgcggc gaggcaccga
780
caagccgtag ccctgagacc actcaaagcc tgca
814

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<210> 2906
<211> 200
<212> PRT
<213> Homo sapiens

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<400> 2906
Phe Ser Tyr Pro Ser Phe Val Tyr Leu Gly Thr Phe Thr Leu Val Asp
1          5          10          15
Asn Arg Ile Pro Val Thr Arg Ser Phe Cys Ile Thr Asn Ser Ala
      20          25          30
Thr Leu Phe Gln Asn Trp Val Ser Gly Phe Leu Leu Cys Pro Gly Phe

```

```

      35              40              45
Cys  Cys  Pro  Pro  Lys  Arg  Lys  Thr  Cys  Ser  Trp  Ala  Trp  Trp  Tyr  Thr
 50              55              60
Ser  Val  Val  Pro  Val  Thr  Gln  Glu  Ala  Glu  Ala  Gly  Gly  Leu  Leu  Glu
65              70              75              80
Pro  Arg  Cys  Ser  Arg  Leu  Gln  Trp  Ala  Val  Asn  Ala  Leu  Leu  His  Ser
      85              90              95
Ser  Leu  Ser  Asn  Arg  Ala  Arg  Pro  Arg  Pro  Ser  Ser  Arg  Leu  Ser  Ile
      100              105              110
Pro  Pro  Pro  Gln  His  Pro  Phe  Leu  Leu  Glu  Met  Gly  Phe  Gly  Val  Val
      115              120              125
Asn  Gln  Ala  Gln  Gly  Asn  Leu  Arg  Gly  Pro  Ala  Ser  Ser  Val  Arg  Cys
      130              135              140
Arg  Arg  Ser  Thr  Arg  Pro  Arg  Pro  Gly  Ser  Ala  Arg  Arg  Glu  Lys  Ala
145              150              155              160
Ala  Thr  Pro  Gly  Val  Arg  Glu  Leu  Arg  Leu  Glu  Gly  Ala  Trp  Gln  Ala
      165              170              175
Gly  Arg  Gly  Pro  Gly  Gly  Gly  Ser  Ala  Tyr  Asp  Arg  Arg  Trp  Gly  Glu
      180              185              190
Leu  Leu  Asp  Val  Lys  Gly  Pro  Leu
      195              200

```

<210> 2907

<211> 379

<212> DNA

<213> Homo sapiens

<400> 2907

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120
aaacagcatc ttacttttcc ccagggtgct ttccaatttc caacactgtc cccaagatta
180
caaaggcaaa ggaattcttc ccttaatggt ggacgggtcct gagactgtc caccctgggc
240
tcattacact gggaccagct ttaagcttcc ctgttcaacg cggagagctc cacagcccag
300
gacgacagag cagatgatgg caagacgccc tcaaaaccca gacaggcctt cttggcttgc
360
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379

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<210> 2908

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2908

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Met Thr Val Ser Asp Arg Pro Ser Ala Gly Cys Asp Leu Pro Lys Leu
 1              5              10              15
Met Thr Ala Ser Leu Asn Gly Trp Val Leu Arg Asn Ser Ile Phe Thr
      20              25              30
Phe Pro Arg Leu Leu Ser Asn Phe Gln His Cys Pro Gln Asp Tyr Lys

```


tgaactgcag gtctcacgct ggctgcatga cttggtgccc cctggctggc tgagccactg
 1140
 cctgccacct tctcatacca ttactgtggg gtctaaagag gacatcatcc ccaaccaaag
 1200
 aatagtgaga gagaaaatcc caaacatttg agacagggtt caaaagcacc cagacgcctt
 1260
 ctgtctcttt ccagttccc atctggctag ggactgtgaa tcagaattca gaatctgtgc
 1320
 tgccctgagg ggacaggcac ccaaatgcaa taaataacac caagctcagg acccagccac
 1380
 tgaccttctt ccaccactgc tgcgggttat tctctgatgg gaactgaagg atccaaggga
 1440
 ggaatccggt cgcgcccaa acctccctgc acaacatcga atgcgggagt ctggctgctg
 1500
 cttctgcaca ggacagagcc tccagtcttt tgcttgagag catcatttat ggcatggact
 1560
 gggaaacgcaa tgtgttcaca caaatgcacg acaattgtac atcagcatct ttacaatatt
 1620
 aaaggagtcata tacaagtc tacagccatt gtacacagga tgggtgatggc tggggagccc
 1680
 cgccccaccg tcctctgcag ttctccacc ggagaacact tggggagctg tcacaaggcc
 1740
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 1800
 gggccagtc tcaactggaat caggggtcaa gagcgcagg tctgcctgtg tctgggtctc
 1860
 atcggcaggc tagtgtaaca acgtgaatta aaactgtgca tattcgcatg agaaaaactgg
 1920
 agctggggat ggctccctga gctggggacc tagaagacgc tgctgacaga tggggccctt
 1980
 catgggtggg ccatttcttg aggtaacgtg cagccctgag gctggctcga acgggaggag
 2040
 acttctccag cagcccgagt gccagtcac acagacagga ctggaagccc ctgggcagca
 2100
 ggtcagggtga cccggggagt gcagcctgag ccccaacgg cagcaaacgt gaaggtctca
 2160
 ggtggttaca gaatcactca gccctcaggc cccaccact ctctccctcag cagccctgca
 2220
 gcacacatcc ctgcattctg ccgagagacc ccagccctgc aggcattctg gctgaaatgc
 2280
 caggcagctg gtccaccctg cagccatgct gcacgtctga ctgagaactg agcaccagat
 2340
 aaagaagcat tggctctgtg cagcctctct gacttttgca gttagggtct catccattta
 2400
 aatatgtaga aaaatagcca
 2420

<210> 2910

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2910

Met Gly Thr Glu Gly Ser Lys Gly Gly Ile Arg Ser Ala Pro Lys Pro

1	5	10	15
Pro Cys Thr Thr Ser Asn Ala Gly Val Trp Leu Leu Leu His Arg			
	20	25	30
Thr Glu Pro Pro Val Phe Cys Leu Arg Ala Ser Phe Met Ala Trp Thr			
	35	40	45
Gly Asn Ala Met Cys Ser His Lys Cys Thr Thr Ile Val His Gln His			
	50	55	60
Leu Tyr Asn Ile Lys Gly Val Ile Tyr Lys Ser Thr Ala Ile Val His			
	65	70	75
Arg Met Val Met Ala Gly Glu Pro Arg Pro Pro Val Leu Cys Ser Phe			
	85	90	95
Ser Thr Gly Glu His Leu Gly Ser Cys His Lys Ala Arg Gly Gly Pro			
	100	105	110
Ser Leu Gly Leu Ser Trp Gly Arg Gln Gln Val Cys Lys Asp Ser Ser			
	115	120	125
Gly Pro Val Leu Thr Gly Ile Arg Gly Gln Glu Arg Gln Val Cys Leu			
	130	135	140
Cys Leu Gly Leu Ile Gly Arg Leu Val			
145	150		

<210> 2911

<211> 1327

<212> DNA

<213> Homo sapiens

<400> 2911

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120
gtgcgggagc cggggaagcg gagcgagggc gggaagacct cgtggcccg gagcagcgga
180
ggcgggggct gggcagacct ccgaactgac ctgagcctgc tgctgctggg gacgtgcctg
240
ggcctggcct ggtttgtatt tcagcagtcg gaaaaatttg caaaggtgga aaaccaatac
300
cagttactga aactagaaac caatgaattc caacaacttc aaagtaaaat cagtttaatt
360
tcagaaaagt ggcagaaatc tgaagctatc atggaacaat tgaagctctt tcaataaatt
420
gtcatcttaa agcgtctaca ggaagaaatt aatgaggtaa aaacttggtc caatagcata
480
actgaaaaac aggatatact gaacaacagt ctgacgagcg tttctcaaga cattacaaaa
540
gtagacaaaa gtacaacttc catggcaaaa gatgttggtc tcaagattac aagtgtaaaa
600
acagatatat gacggatttc aggttttagt actgatgtaa tatcattgac agattctgtg
660
caagaactag aaaataaaat agagaaagta gaaaaaata cagtaaaaaa tatagggtat
720
cttctttcaa gcagtattga tcgaacagca acgctccgaa agacagcctc tgaataattca
780
caaagaatta actctgttaa gaagacgcta accgaactaa agagtgactt cgacaaacat
840

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acagatagat ttctaagctt agaaggtgac agagccaaag ttctgaagac agtgactttt
 900
 gcaaatgac taaaaccaa ggtgtataat ctaaagaagg acttttcccg tttagaacca
 960
 ttagtaaatg atttaacact acgcattggg agattgggta cgcacttact acaagagag
 1020
 aaagaaattg ctttcttaag tgaaaaaata tctaatttaa caatagtcca agctgagatt
 1080
 aaggatatta aagatgaaat agcacacatt tcagatatga attagtgtga cattattgag
 1140
 attagactaa ggtaattttt ttaatgggac ctctcatgag aagactggta aatcaaaaa
 1200
 aatgatattt tggagcaaaa gtcattttat atttaatcct attttgtaca gtaaaaaata
 1260
 aactttaaaa caggttgatt ttccaaaata aatatgctaa aacattttt tgcaacttta
 1320
 aaaaaaa
 1327

<210> 2912

<211> 350

<212> PRT

<213> Homo sapiens

<400> 2912

Met	Ser	Glu	Val	Lys	Ser	Arg	Lys	Lys	Ser	Gly	Pro	Lys	Gly	Ala	Pro
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Ala	Ala	Glu	Pro	Gly	Lys	Arg	Ser	Glu	Gly	Gly	Lys	Thr	Pro	Val	Ala
		20						25					30		
Arg	Ser	Ser	Gly	Gly	Gly	Trp	Ala	Asp	Pro	Arg	Thr	Cys	Leu	Ser	
		35				40					45				
Leu	Leu	Ser	Leu	Gly	Thr	Cys	Leu	Gly	Leu	Ala	Trp	Phe	Val	Phe	Gln
	50					55					60				
Gln	Ser	Glu	Lys	Phe	Ala	Lys	Val	Glu	Asn	Gln	Tyr	Gln	Leu	Leu	Lys
65				70						75				80	
Leu	Glu	Thr	Asn	Glu	Phe	Gln	Gln	Leu	Gln	Ser	Lys	Ile	Ser	Leu	Ile
			85					90					95		
Ser	Glu	Lys	Trp	Gln	Lys	Ser	Glu	Ala	Ile	Met	Glu	Gln	Leu	Lys	Ser
			100					105					110		
Phe	Gln	Ile	Ile	Ala	His	Leu	Lys	Arg	Leu	Gln	Glu	Glu	Ile	Asn	Glu
		115					120					125			
Val	Lys	Thr	Trp	Ser	Asn	Arg	Ile	Thr	Glu	Lys	Gln	Asp	Ile	Leu	Asn
		130				135					140				
Asn	Ser	Leu	Thr	Thr	Leu	Ser	Gln	Asp	Ile	Thr	Lys	Val	Asp	Gln	Ser
145				150						155				160	
Thr	Thr	Ser	Met	Ala	Lys	Asp	Val	Gly	Leu	Lys	Ile	Thr	Ser	Val	Lys
			165					170						175	
Thr	Asp	Ile	Arg	Arg	Ile	Ser	Gly	Leu	Val	Thr	Asp	Val	Ile	Ser	Leu
			180					185					190		
Thr	Asp	Ser	Val	Gln	Glu	Leu	Glu	Asn	Lys	Ile	Glu	Lys	Val	Glu	Lys
		195				200						205			
Asn	Thr	Val	Lys	Asn	Ile	Gly	Asp	Leu	Leu	Ser	Ser	Ser	Ile	Asp	Arg
210						215					220				
Thr	Ala	Thr	Leu	Arg	Lys	Thr	Ala	Ser	Glu	Asn	Ser	Gln	Arg	Ile	Asn


```

225                230                235                240
Ser Val Lys Lys Thr Leu Thr Glu Leu Lys Ser Asp Phe Asp Lys His
                245                250                255
Thr Asp Arg Phe Leu Ser Leu Glu Gly Asp Arg Ala Lys Val Leu Lys
                260                265                270
Thr Val Thr Phe Ala Asn Asp Leu Lys Pro Lys Val Tyr Asn Leu Lys
                275                280                285
Lys Asp Phe Ser Arg Leu Glu Pro Leu Val Asn Asp Leu Thr Leu Arg
                290                295                300
Ile Gly Arg Leu Val Thr Asp Leu Leu Gln Arg Glu Lys Glu Ile Ala
305                310                315                320
Phe Leu Ser Glu Lys Ile Ser Asn Leu Thr Ile Val Gln Ala Glu Ile
                325                330                335
Lys Asp Ile Lys Asp Glu Ile Ala His Ile Ser Asp Met Asn
                340                345                350

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<210> 2913
<211> 361
<212> DNA
<213> Homo sapiens

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<400> 2913
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atccagcaac tgaggaccaa catccagctt cctgcctgcc tccgtgtcat tggtacctg
120
cggcgcgatg acgtcttcac tgaggetgag ttgaggggtga agttcttcca ggcccagat
180
gcttggtccc ggtccatcct gactgccatt cctaagtatg atccctattt ccatattaca
240
aaaaccatcg agggcctccc gtgtccatct ctttgatatc atcaccagct accgggcat
300
cttctcagac gaggaccac tgctgcccc tgccatgggt gagcacactg ggatgagagt
360
g
361

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<210> 2914
<211> 112
<212> PRT
<213> Homo sapiens

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<400> 2914
Met Ala Gly Gly Ser Ser Gly Ser Ser Glu Lys Met Ala Arg Tyr
1                5                10                15
Trp Val Met Ile Ser Lys Arg Trp Thr Arg Glu Ala Leu Asp Gly Phe
                20                25                30
Cys Asn Met Glu Ile Gly Ile Ile Arg Asn Gly Ser Gln Asp Gly
                35                40                45
Pro Glu Pro Ser Ile Ser Gly Leu Lys Lys Leu His Pro Gln Leu Ser
                50                55                60
Leu Ser Glu Asp Val His Ala Pro Gln Val Ala Asn Asp Thr Glu Ala
65                70                75                80
Gly Arg Lys Leu Asp Val Gly Pro Gln Leu Leu Asp Gln Leu Ala Gln

```

	85		90		95
His	Gln	Leu	His	Gly	Leu
		Ala	His	Phe	Val
			His	Asp	Ala
				Leu	Asp
	100		105		110

<210> 2915

<211> 1782

<212> DNA

<213> Homo sapiens

<400> 2915

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caagaggatc accttaaca ctttaagaacc ctcgaaaaaa cattagaaaa aatggagaga
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caaaaaaggc agcagcaggc agcacagata agactgatcc aagagggtgga actcaaaagt
120
tcagctgccg atagagaaat atactttactt agaacttccc ttcatcgaga aagagaacaa
180
gcgcaacaac ttcatacaact tcttgcatcg aaagaacagg aacacaggaa ggaacttgaa
240
acaagggagt tttttactga tgctgacttc caggatgcct tagctaaaga aatagccaaa
300
gaagagaaaa agcatgagca aatgataaaa gaataccaag agaaaattga cgtgttaagc
360
cagcagtata tggatttaga aaatgaattc cgtattgctt taactgttga agccagaaga
420
tttcaagatg ttaaagatgg ttttgaaaaa gttgcaactg agttagcaaa gagcaaacat
480
gctcttattt gggctcaacg aaaagaaaaa gagtcttcct cttaatttaa agatctgacc
540
tgtatggtta aggaacaaaa aacaaaactg gcagaagttt ctaaattgaa acaagaaaaa
600
gcagcaaatt tacagaatca aatcaacacc cttgaaattt taattgaaga tgacaagcag
660
aagagtattc aaatagaact tctcaagcac gaaaaagtcc agcttatttc tgagctagca
720
gccaaaggaat cactaatatt tgggttaagg acagaaagaa aagtatgggg acatgagctg
780
gcacaacaag gatcttctct agcccaaaat cgtggaaaat tggaggctca aattgagagt
840
ttatctagag agaataatg tctgcgaaag acaaatgaaa gtgatagtga tgcattaaga
900
ataaagtgca aaatcataga gcaccaaact gaaactatta gaaaatttaa agattgttta
960
caagaaaaag atgaacacat caaaagatta caagaaaaaga tcacagaaat agaaaaatgc
1020
actcaagaac aacttgatga aaaatcttca caactggatg aggtacttga gaagtggaa
1080
aggcacaatg aaagaaaaa aaaactaaaa caacagttga aaggaaaagg agtagaactt
1140
gaagaaatca gaaaagctta cagtacactg aatcggaagt ggcgatgata aggagaactt
1200
ctatgtcatc ttgaacaca agtaaaagaa gtgaaagaaa aatttgaaaa caaggaaaag
1260
aaacttaaa cggaagagaa caaaagtatt gaactacaaa agaatacgaat ggaaaaactt
1320

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catagtatgg atgatgcctt taaaagacaa gttgatgcaa ttgttgaagc tcatcaagct
 1380
 gaaatagcac agctggccaa tgaagaagcag aagtgtattg attctgcaaa tttaaaggctc
 1440
 catcaaatgg aaaaagaat gcgtgaactt ttggaagaaa catgcaagaa caaaaaaaca
 1500aaattaagca acttgctttt gctttaaatg aaattcagca agatatgtga 1560
 tggttctgag aatgaattta attgaaatag accagcagac ctattgtaaa aatgattaaa
 1620
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 1680
 aatatatttt taaagacttt tgatcaagta tttattaatt gtatagggttt tttataataa
 1740
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 1782

<210> 2916

<211> 519

<212> PRT

<213> Homo sapiens

<400> 2916

Gln	Glu	Asp	His	Leu	Lys	His	Leu	Arg	Thr	Leu	Glu	Lys	Thr	Leu	Glu
1				5					10					15	
Lys	Met	Glu	Arg	Gln	Lys	Arg	Gln	Gln	Ala	Ala	Gln	Ile	Arg	Leu	
			20					25				30			
Ile	Gln	Glu	Val	Glu	Leu	Lys	Ala	Ser	Ala	Ala	Asp	Arg	Glu	Ile	Tyr
			35				40					45			
Leu	Leu	Arg	Thr	Ser	Leu	His	Arg	Glu	Arg	Glu	Gln	Ala	Gln	Gln	Leu
	50					55					60				
His	Gln	Leu	Leu	Ala	Leu	Lys	Glu	Gln	Glu	His	Arg	Lys	Glu	Leu	Glu
					70					75				80	
Thr	Arg	Glu	Phe	Phe	Thr	Asp	Ala	Asp	Phe	Gln	Asp	Ala	Leu	Ala	Lys
			85						90					95	
Glu	Ile	Ala	Lys	Glu	Glu	Lys	Lys	His	Glu	Gln	Met	Ile	Lys	Glu	Tyr
			100					105					110		
Gln	Glu	Lys	Ile	Asp	Val	Leu	Ser	Gln	Gln	Tyr	Met	Asp	Leu	Glu	Asn
			115				120					125			
Glu	Phe	Arg	Ile	Ala	Leu	Thr	Val	Glu	Ala	Arg	Arg	Phe	Gln	Asp	Val
			130			135					140				
Lys	Asp	Gly	Phe	Glu	Asn	Val	Ala	Thr	Glu	Leu	Ala	Lys	Ser	Lys	His
					150					155				160	
Ala	Leu	Ile	Trp	Ala	Gln	Arg	Lys	Glu	Asn	Glu	Ser	Ser	Ser	Leu	Ile
			165					170						175	
Lys	Asp	Leu	Thr	Cys	Met	Val	Lys	Glu	Gln	Lys	Thr	Lys	Leu	Ala	Glu
			180					185					190		
Val	Ser	Lys	Leu	Lys	Gln	Glu	Thr	Ala	Ala	Asn	Leu	Gln	Asn	Gln	Ile
			195				200					205			
Asn	Thr	Leu	Glu	Ile	Leu	Ile	Glu	Asp	Asp	Lys	Gln	Lys	Ser	Ile	Gln
			210			215						220			
Ile	Glu	Leu	Leu	Lys	His	Glu	Lys	Val	Gln	Leu	Ile	Ser	Glu	Leu	Ala
					230					235				240	
Ala	Lys	Glu	Ser	Leu	Ile	Phe	Gly	Leu	Arg	Thr	Glu	Arg	Lys	Val	Trp
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Lys Leu Glu Ala Gln Ile Glu Ser Leu Ser Arg Glu Asn Glu Cys Leu
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Arg Lys Thr Asn Glu Ser Asp Ser Asp Ala Leu Arg Ile Lys Cys Lys
290                295                300
Ile Ile Asp Asp Gln Thr Glu Thr Ile Arg Lys Leu Lys Asp Cys Leu
305                310                315                320
Gln Glu Lys Asp Glu His Ile Lys Arg Leu Gln Glu Lys Ile Thr Glu
325                330                335
Ile Glu Lys Cys Thr Gln Glu Gln Leu Asp Glu Lys Ser Ser Gln Leu
340                345                350
Asp Glu Val Leu Glu Lys Leu Glu Arg His Asn Glu Arg Lys Glu Lys
355                360                365
Leu Lys Gln Gln Leu Lys Gly Lys Glu Val Glu Leu Glu Glu Ile Arg
370                375                380
Lys Ala Tyr Ser Thr Leu Asn Arg Lys Trp His Asp Lys Gly Glu Leu
385                390                395                400
Leu Cys His Leu Glu Thr Gln Val Lys Glu Val Lys Glu Lys Phe Glu
405                410                415
Asn Lys Glu Lys Lys Leu Lys Ala Glu Arg Asp Lys Ser Ile Glu Leu
420                425                430
Gln Lys Asn Ala Met Glu Lys Leu His Ser Met Asp Asp Ala Phe Lys
435                440                445
Arg Gln Val Asp Ala Ile Val Glu Ala His Gln Ala Glu Ile Ala Gln
450                455                460
Leu Ala Asn Glu Lys Gln Lys Cys Ile Asp Ser Ala Asn Leu Lys Val
465                470                475                480
His Gln Ile Glu Lys Glu Met Arg Glu Leu Leu Glu Glu Thr Cys Lys
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<210> 2917

<211> 2636

<212> DNA

<213> Homo sapiens

<400> 2917

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240
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420

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<210> 2918

<211> 509

<212> PRT

<213> Homo sapiens

<400> 2918

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 Met Asp Glu Leu Val Pro Leu Gly Glu Leu Thr Lys His Ser Thr Ser
 35 40 45
 Ala Val Asp Leu Ser Thr Xaa Phe Ala Gln Ile Ser His Thr Ala Arg
 50 55 60
 Gln Leu Asp Trp Pro Asp Pro Glu Glu Ala Phe Met Ile Thr Val Lys
 65 70 75 80
 Phe Val Glu Asp Thr Cys Arg Leu Ala Leu Val Tyr Cys Ser Leu Ile
 85 90 95
 Lys Ala Arg Ala Arg Glu Leu Ser Ser Gly Gln Lys Asp Gln Gly Gln
 100 105 110
 Ala Ala Asn Met Leu Cys Val Val Asn Asp Met Glu Gln Leu Arg
 115 120 125
 Leu Val Ile Gly Lys Leu Pro Ala Gln Leu Ala Trp Glu Ala Leu Glu
 130 135 140
 Gln Arg Val Gly Ala Val Leu Glu Gln Gly Gln Leu Gln Asn Thr Leu
 145 150 155 160
 His Ala Gln Leu Gln Ser Ala Leu Ala Gly Leu Gly His Glu Ile Arg
 165 170 175
 Thr Gly Val Arg Thr Leu Ala Glu Gln Leu Glu Val Gly Ile Ala Lys
 180 185 190
 His Ile Gln Lys Leu Val Gly Val Arg Glu Ser Val Leu Pro Glu Asp
 195 200 205
 Ala Ile Leu Pro Leu Met Lys Phe Leu Glu Val Glu Leu Cys Tyr Met

210	215	220
Asn Thr Asn Leu Val Gln Glu Asn Phe Ser Ser Leu Leu Thr Leu Leu		
225	230	235
Trp Thr His Thr Leu Thr Val Leu Val Glu Ala Ala Ala Ser Gln Arg		240
	245	250
Ser Ser Ser Leu Ala Ser Asn Arg Leu Lys Ile Ala Leu Gln Asn Leu		255
	260	265
Glu Ile Cys Phe His Ala Glu Gly Cys Gly Leu Pro Pro Lys Ala Leu		270
	275	280
His Thr Ala Thr Phe Gln Ala Leu Gln Arg Asp Leu Glu Leu Gln Ala		285
	290	295
Ala Ser Ser Arg Glu Leu Ile Arg Lys Tyr Phe Cys Ser Arg Ile Gln		300
	305	310
Gln Gln Ala Glu Thr Thr Ser Glu Glu Leu Gly Ala Val Thr Val Lys		315
	320	325
Ala Ser Tyr Arg Ala Ser Glu Gln Lys Leu Arg Val Glu Leu Leu Ser		330
	335	340
Ala Ser Ser Leu Leu Pro Leu Asp Ser Asn Gly Ser Ser Asp Pro Phe		345
	350	355
Val Gln Leu Thr Leu Glu Pro Arg His Glu Phe Pro Glu Leu Ala Ala		360
	365	370
Arg Glu Thr Gln Lys His Lys Lys Asp Leu His Pro Leu Phe Asp Glu		375
	380	385
Thr Phe Glu Phe Leu Val Pro Ala Glu Pro Cys Arg Lys Ala Gly Ala		390
	395	400
Cys Leu Leu Leu Thr Val Leu Asp Tyr Asp Thr Leu Gly Ala Asp Asp		405
	410	415
Leu Glu Gly Glu Ala Phe Leu Pro Leu Arg Glu Val Pro Gly Leu Ser		420
	425	430
Gly Ser Glu Glu Pro Gly Glu Val Pro Gln Thr Arg Leu Pro Leu Thr		435
	440	445
Tyr Pro Ala Pro Asn Gly Asp Pro Ile Leu Gln Leu Leu Glu Gly Arg		450
	455	460
Lys Gly Asp Arg Glu Ala Gln Val Phe Val Arg Leu Arg Arg His Arg		465
	470	475
Ala Lys Gln Ala Ser Gln His Ala Leu Arg Pro Ala Pro		480
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<210> 2919

<211> 455

<212> DNA

<213> Homo sapiens

<400> 2919

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<210> 2920

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2920

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Glu	Lys	Glu	Glu	Gly	Gly	Ser	Thr	Glu	Ala	Val	His	Ser	Gly	Leu	Ala
		20						25					30		
Arg	Gln	Val	Ser	Ser	Leu	Leu	Thr	Asn	His	Leu	Ala	Arg	Ala	Thr	Glu
		35				40						45			
Cys	Cys	Gly	Asn	Gln	Ala	Ala	Gly	Asn	Asp	Ala	Leu	Gln	Asp	Val	Leu
	50				55					60					
Ser	Leu	Leu	Asn	Asp	Leu	Ser	Arg	Ser	His	Ile	Gly	Lys	Ala	Ile	Leu
	65			70					75				80		
Ser	Gln	Pro	Ala	Cys	Val	Ser	Lys	Leu	Leu	Ser	Leu	Leu	Leu	Asp	Gln
			85					90						95	
Arg	Pro	Ser	Pro	Lys	Leu	Val	Leu	Ile	Ile	Leu	Gln	Leu	Cys	Arg	Ala
			100				105						110		
Ala	Leu	Pro	Leu	Met	Ser	Val	Glu	Asp	Cys	Gly	Asn	Val	Glu	Leu	Pro
		115				120					125				
Pro	Trp	Ser	Tyr	Ser	Val	Pro	Ser	Leu	Asn	Ser	Glu	Gln	Glu	Asp	
	130					135					140				

<210> 2921

<211> 1855

<212> DNA

<213> Homo sapiens

<400> 2921

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<210> 2922

<211> 452

<212> PRT

<213> Homo sapiens

<400> 2922

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Lys Ile Val Arg Ala Gln Gly Gln Tyr Met Tyr Asp Glu Gln Gly Ala			
	35	40	45
Glu Tyr Ile Asp Cys Ile Ser Asn Val Ala His Val Gly His Cys His			
	50	55	60
Pro Leu Val Val Gln Ala Ala His Glu Gln Asn Gln Val Leu Asn Thr			
	65	70	75
Asn Ser Arg Tyr Leu His Asp Asn Ile Val Asp Tyr Ala Gln Arg Leu			
	85	90	95
Ser Glu Thr Leu Pro Glu Gln Leu Cys Val Phe Tyr Phe Leu Asn Ser			
	100	105	110
Gly Ser Glu Ala Asn Asp Leu Ala Leu Arg Leu Ala Arg His Tyr Thr			
	115	120	125
Gly His Gln Asp Val Val Val Leu Asp His Ala Tyr His Gly His Leu			
	130	135	140
Ser Ser Leu Ile Asp Ile Ser Pro Tyr Lys Phe Arg Asn Leu Asp Gly			
	145	150	155
Gln Lys Glu Trp Val His Val Ala Pro Leu Pro Asp Thr Tyr Arg Gly			
	165	170	175
Pro Tyr Arg Xaa Arg Thr Thr Pro Thr Gln Leu Trp Xaa Tyr Ala Asn			
	180	185	190
Glu Val Lys Arg Val Val Ser Ser Ala Gln Glu Lys Gly Arg Lys Ile			
	195	200	205
Ala Ala Phe Phe Ala Glu Ser Leu Pro Ser Val Gly Gly Gln Ile Ile			
	210	215	220
Pro Pro Ala Gly Tyr Phe Ser Gln Val Ala Glu His Ile Arg Lys Ala			
	225	230	235
Gly Gly Val Phe Val Ala Asp Glu Ile Gln Val Gly Phe Gly Arg Val			
	245	250	255
Gly Lys His Phe Trp Ala Phe Gln Leu Gln Gly Lys Asp Phe Val Pro			
	260	265	270
Asp Ile Val Thr Met Gly Lys Ser Ile Gly Asn Gly His Pro Val Ala			
	275	280	285
Cys Val Ala Ala Thr Gln Pro Val Ala Arg Ala Phe Glu Ala Thr Gly			
	290	295	300
Val Glu Tyr Phe Asn Thr Phe Gly Gly Ser Pro Val Ser Cys Ala Val			
	305	310	315
Gly Leu Ala Val Leu Asn Val Leu Glu Lys Glu Gln Leu Gln Asp His			
	325	330	335
Ala Thr Ser Val Gly Ser Phe Leu Met Gln Leu Leu Trp Gln Gln Lys			
	340	345	350
Ile Arg His Pro Ile Val Gly Asp Val Arg Gly Val Gly Leu Phe Ile			
	355	360	365
Gly Val Asp Leu Ile Lys Asp Glu Ala Thr Arg Thr Pro Ala Thr Glu			
	370	375	380
Glu Ala Xaa Val Tyr Leu Val Ser Arg Leu Lys Glu Asn Tyr Val Leu			
	385	390	395
Leu Ser Thr Asp Gly Pro Gly Arg Asn Ile Leu Lys Phe Lys Pro Pro			
	405	410	415
Met Cys Phe Ser Leu Asp Asn Ala Arg Gln Val Val Ala Lys Leu Asp			
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Ala Ile Leu Thr Asp Met Glu Glu Lys Val Arg Ser Cys Glu Thr Leu			

445

Arg Leu Gln Pro
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<210> 2923
<211> 572
<212> DNA
<213> Homo sapiens

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<210> 2924
<211> 91
<212> PRT
<213> Homo sapiens

<400> 2924
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20 25 30
Arg Arg Asn Ser Val Tyr Cys Gly Gly Glu Leu Gly Gly Ala Gln Pro
35 40 45
Arg Arg Thr Gly Ser Thr Ala Ala Pro Ala Ser Ala Pro Pro Ile Ala
50 55 60
Gly Thr Gly Ser Pro Gly Trp Gln Arg Ser Leu Gln Pro Ala Leu Gly
65 70 75 80
Pro Arg Thr Ala Ser Trp Gln Trp Trp Glu Gln
85 90

<210> 2925
<211> 1999
<212> DNA
<213> Homo sapiens

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 720
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 780
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<211> 305

<212> PRT

<213> Homo sapiens

<400> 2926

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 <212> PRT
 <213> Homo sapiens

<400> 2930

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Gln Lys Glu Asn Met Ile Asp Lys Asp Val Glu Leu Ser Val Val Leu
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Pro Gly Asp Ile Ile Lys Ser Thr Thr Val His Gly Ser Lys Pro Met
65      70      75      80
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85      90      95
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Lys Pro Lys Met Leu Asp Lys Lys Lys Pro Thr Pro Ile Ile Pro Glu
130     135     140
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145     150     155     160
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165     170     175
Cys Ser Lys Cys Glu Phe Asp Pro Leu His Thr Leu Leu Leu Lys Asp
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Tyr Gln Ser Gln Glu Pro Leu Asp Leu Thr Lys Ser Leu Asn Asp Leu
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260     265     270
Ser Asn Thr Ile Ser Lys Pro Tyr Ile Ser Asn Thr Leu Pro Ser Asp
275     280     285
Ala Pro Lys Lys Arg Arg Ala Pro Leu Pro Pro Met Pro Ala Ser Gln
290     295     300
Ser Val Pro Gln Asp Leu Ala His Ile Gln Glu Arg Pro Ala Ser Cys
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Ile Val Lys Ser Met Ser Val Asp Glu Thr Asp Lys Ser Pro Cys Glu
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Ile	Arg	Asn	Leu	Lys	Ser	Leu	Gly	Pro	Asn	Gln	Glu	Asn	Val	Gln	Asn
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<211> 625

<212> DNA

<213> Homo sapiens

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Asp Lys Pro Asp Ser Val Leu Thr His His Val Pro Arg Asn Leu Gln
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<212> DNA

<213> Homo sapiens

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240

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cttgagacac agaacaataa tttgcaggct cagattcttg cacttcagag gcagacagtg
 300
 tcattacaag aacagaatac cactcttcaa acacagaatg ccaagcttca ggttgaaaat
 360
 tccaccctta attcccaaag tacctcactc atgaaccaga atgcccaact cctaataccag
 420
 cagtcttctc tagaaaaatga aatgaatct gtaatcaaag agcgagaaga cctaaaaatct
 480
 ctctatgatt ctctgatcaa agatcatgaa aagctggaac ttcttcatga acgtcaggct
 540
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 600
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 660
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 688

<210> 2934

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2934

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Lys	Gln	Arg	Gln	Asp	Glu	Glu	Arg	Met	Val	Gln	Ser	Ser	Pro	Pro	Ile
			20					25					30		
Ser	Gly	Glu	Asp	Asn	Lys	Trp	Glu	Arg	Glu	Ser	Gln	Glu	Thr	Thr	Arg
	35					40						45			
Glu	Leu	Leu	Lys	Val	Lys	Asp	Arg	Leu	Ile	Glu	Val	Glu	Arg	Asn	Asn
	50					55				60					
Ala	Thr	Leu	Gln	Ala	Glu	Lys	Gln	Ala	Leu	Lys	Thr	Gln	Leu	Lys	Gln
65				70					75					80	
Leu	Glu	Thr	Gln	Asn	Asn	Leu	Gln	Ala	Gln	Ile	Leu	Ala	Leu	Gln	
			85					90						95	
Arg	Gln	Thr	Val	Ser	Leu	Gln	Glu	Gln	Asn	Thr	Thr	Leu	Gln	Thr	Gln
	100							105					110		
Asn	Ala	Lys	Leu	Gln	Val	Glu	Asn	Ser	Thr	Leu	Asn	Ser	Gln	Ser	Thr
	115						120				125				
Ser	Leu	Met	Asn	Gln	Asn	Ala	Gln	Leu	Leu	Ile	Gln	Gln	Ser	Ser	Leu
	130				135						140				
Glu	Asn	Glu	Asn	Glu	Ser	Val	Ile	Lys	Glu	Arg	Glu	Asp	Leu	Lys	Ser
145				150					155					160	
Leu	Tyr	Asp	Ser	Leu	Ile	Lys	Asp	His	Glu	Lys	Leu	Glu	Leu	Leu	His
			165					170						175	
Glu	Arg	Gln	Ala	Ser	Glu	Tyr	Glu	Ser	Leu	Ile	Ser	Lys	His	Gly	Thr
	180						185						190		
Leu	Lys	Ser	Ala	His	Lys	Asn	Leu	Glu	Val	Glu	His	Arg	Asp	Leu	Glu
	195					200						205			
Asp	Arg	Tyr	Asn	Gln	Leu	Leu	Lys	Gln	Lys	Gly	Gln	Leu	Glu	Asp	Leu
	210					215					220				
Glu	Lys	Met	Leu	Lys											
225															

<210> 2935
<211> 1200
<212> DNA
<213> Homo sapiens

<400> 2935
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120
aactctaaaa gataaagcaa gaaatgtcaa gtaggttttg cacattgggc tgcttttaggc
180
tgtgccctct gattcttctg gtgtactcat gatactctcc cttgggtgcc tccaggtga
240
cgcagctatt tacgttcaga gtgaaatggg ctgtgtggct gggattggga aaggccttgt
300
taaagctggg agaggtttgg tcatgggtgac aggggacctg aaggccacgc tctctctccc
360
tcttgccaat acagggacaa gttaaagaag aagaagaaag taaaggtaaa gatggaaaag
420
aaatccacgc cctctagggg ctcatcatcc aagtcgtcct caaggcagct aagcgagagc
480
ttcaagagca aagagtttgt gtctagtgat gagagctctt cgggagagaa caagagcaaa
540
aagaagagga ggaggagcga ggactctgaa gaagaagaac tagccagtag tccccccagc
600
tcagaggact cagcgtcagg atccgatgag tagaaacgga ggaagggttct ctttgcgctt
660
gccttctcac acccccgcga agtcagcagg gaaacgcaga gaactcctat gaaccaccaa
720
aaggctgtaa atgatgaaac atgcaaaact agccacataa catcaagtgt ctttcttca
780
gcctctctcg gtaaagcatc atctcgaaag ccatttggga tcttcttccc aaatgttctg
840
tgcagtatga gtgggaagag tctctgtagag agcagcttga atgttaaaac caaaaagaat
900
gcaccatctg caacgatcca ccagggcgaa gaagaaggac cacttgatat ctgggctgtt
960
gtgaaacctg gaaataccaa ggaaaaaatt gcattctttg catcccacca gtgtagtaac
1020
aggataggat ctatgaaat aaaaagttcc tgggatattg atgggagagc tactaagaga
1080
aggaaaaaat caggggatct taaaaaagcc aaggtacagg tggaaggat gagggagggt
1140
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1200

<210> 2936
<211> 109
<212> PRT
<213> Homo sapiens

<400> 2936
Ser Trp Glu Arg Phe Gly His Gly Asp Arg Gly Pro Glu Gly Pro Ala

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Pro	Leu	Pro	Ser	Cys	Gln	Tyr
				20	25	30
Val	Lys	Val	Lys	Met	Glu	Lys
		35			40	45
Ser	Lys	Ser	Ser	Arg	Gln	Leu
		50		55		60
Phe	Val	Ser	Ser	Asp	Glu	Ser
		65		70		75
Lys	Arg	Arg	Arg	Ser	Glu	Asn
			85		90	
Pro	Pro	Ser	Ser	Glu	Asp	Ser
				100		105

<210> 2937
 <211> 749
 <212> DNA
 <213> Homo sapiens

<400> 2937
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 120
 ctctcaaat ttgtcttctg tcaatacaca ttctgggacc agtgtgagtc tacgggtggct
 180
 gccccgggtgg tggaccccgga ggtgccttca ccacagtcga aggatgcccc gtacacagtg
 240
 accttctccc actgtaagga ctatgtgggtg aatgtaacag aagaatttct ggagttcatt
 300
 tcagatggag cactggccat tgaagtatgg ggccaccggt gtgctggaaa tggcagctcc
 360
 atctggggagg tcgattctct tcatgctaag acaagaacac tgcattgacag gtggaatgaa
 420
 gtaacgcgaa gaatagaaat gtggaatctcc atattagaat tgaatgagtt aggagagtat
 480
 gctgcagtg aacttcata ggcaaaagat gtcaacacag gaggcattct tcaacttaga
 540
 cagggtcatt cccgtagagt acaagtcacg gtgaaacctg tgcagcattc agggacactg
 600
 ccacttatgg ttgaagccat cctgtcagta tccatcggtc gtgtaactgc caggtccacc
 660
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 720
 agttatcagg aagaagactt aaactgcag
 749

<210> 2938
 <211> 249
 <212> PRT
 <213> Homo sapiens

<400> 2938
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Glu Ile Ile His Arg Val Lys Lys Leu Thr Cys Arg Val Lys Ile Lys
      20           25           30
Glu Ala Thr Gly Leu Pro Leu Asn Leu Ser Asn Phe Val Phe Cys Gln
      35           40           45
Tyr Thr Phe Trp Asp Gln Cys Glu Ser Thr Val Ala Ala Pro Val Val
      50           55           60
Asp Pro Glu Val Pro Ser Pro Gln Ser Lys Asp Ala Gln Tyr Thr Val
      65           70           75
Thr Phe Ser His Cys Lys Asp Tyr Val Val Asn Val Thr Glu Glu Phe
      85           90           95
Leu Glu Phe Ile Ser Asp Gly Ala Leu Ala Ile Glu Val Trp Gly His
      100          105          110
Arg Cys Ala Gly Asn Gly Ser Ser Ile Trp Glu Val Asp Ser Leu His
      115          120          125
Ala Lys Thr Arg Thr Leu His Asp Arg Trp Asn Glu Val Thr Arg Arg
      130          135          140
Ile Glu Met Trp Ile Ser Ile Leu Glu Leu Asn Glu Leu Gly Glu Tyr
      145          150          155
Ala Ala Val Glu Leu His Gln Ala Lys Asp Val Asn Thr Gly Gly Ile
      165          170          175
Phe Gln Leu Arg Gln Gly His Ser Arg Arg Val Gln Val Thr Val Lys
      180          185          190
Pro Val Gln His Ser Gly Thr Leu Pro Leu Met Val Glu Ala Ile Leu
      195          200          205
Ser Val Ser Ile Gly Cys Val Thr Ala Arg Ser Thr Lys Leu Gln Arg
      210          215          220
Gly Leu Asp Ser Tyr Gln Arg Asp Asp Glu Asp Gly Asp Asp Met Asp
      225          230          235          240
Ser Tyr Gln Glu Glu Asp Leu Asn Cys
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<210> 2939
<211> 2405
<212> DNA
<213> Homo sapiens

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<400> 2939
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120
ccactgcac cagccaatag gagccagacc accatggcgg agctgcagga ggtgcagatc
180
acagaggaga agccactgtt gccaggacag acgcctgagg cgGCCAAGac tcactctgtg
240
gagacacatc acggtcttgt cactttcact gtctatggca cccccaaacc caaacgccca
300
gcgatcctta cctaccacga tgtgggactc aactataaat cttgcttcca gccactgttt
360
cagttcgagg acatgcagga aatcattcag aactttgtgc ggggttcattg ggatgccctt
420
ggaatggaag agggagcccc tgtgttcctt ttgggatatc agtaccatc tctggaccag
480

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cttgacagaca tgatcccttg cgtcctgcag tacctaaatt tctctacaat aattggagtt
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ggtggttgag ctggagccta catcctggcg agatatgctc ttaaccaccc ggacactggt
600
gaaggtcttg tctcatcaa cattgatccc aatgccaagg gttggatgga ttgggcagcc
660
cacaagctaa caggcctcac ctctccatt cgggagatga tctctggaca tcttttcagc
720
caggaagagc tctctggaaa tcttgagttg atacaaaagt acagaaatat cattacacat
780
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960
tcgttcctca agatggctga ctccggaggt cagcccagc tgactcagcc aggcaagctg
1020
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1080
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1140
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1200
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1320
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1380
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tggggctcca ttcaccaaag ctgaggtggc ttctcattaa ccctttagga ctctgaaggg
1680
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1740
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1860
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1920
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1980
tagtatgtgt ggaggtgctc ctccgtctc ccacaacttc tgctataaca ataaactgta
2040
gaggaaacaa agatcaaggt catctcccc catgatctgc cctttttccc ttgcttacgg
2100

tgaaccaatg tcccttcagc acctccagg ttagatatgg gggaggtag ggctgggtcc
 2160
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 2220
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 2280
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<210> 2940

<211> 357

<212> PRT

<213> Homo sapiens

<400> 2940

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 20 25 30
 Tyr Gly Ser Val Thr Phe Thr Val Tyr Gly Thr Pro Lys Pro Lys Arg
 35 40 45
 Pro Ala Ile Leu Thr Tyr His Asp Val Gly Leu Asn Tyr Lys Ser Cys
 50 55 60
 Phe Gln Pro Leu Phe Gln Phe Glu Asp Met Gln Glu Ile Ile Gln Asn
 65 70 75 80
 Phe Val Arg Val His Val Asp Ala Pro Gly Met Glu Glu Gly Ala Pro
 85 90 95
 Val Phe Pro Leu Gly Tyr Gln Tyr Pro Ser Leu Asp Gln Leu Ala Asp
 100 105 110
 Met Ile Pro Cys Val Leu Gln Tyr Leu Asn Phe Ser Thr Ile Ile Gly
 115 120 125
 Val Gly Val Gly Ala Gly Ala Tyr Ile Leu Ala Arg Tyr Ala Leu Asn
 130 135 140
 His Pro Asp Thr Val Glu Gly Leu Val Leu Ile Asn Ile Asp Pro Asn
 145 150 155 160
 Ala Lys Gly Trp Met Asp Trp Ala Ala His Lys Leu Thr Gly Leu Thr
 165 170 175
 Ser Ser Ile Pro Glu Met Ile Leu Gly His Leu Phe Ser Gln Glu Glu
 180 185 190
 Leu Ser Gly Asn Ser Glu Leu Ile Gln Lys Tyr Arg Asn Ile Ile Thr
 195 200 205
 His Ala Pro Asn Leu Asp Asn Ile Glu Leu Tyr Trp Asn Ser Tyr Asn
 210 215 220
 Asn Arg Arg Asp Leu Asn Phe Glu Arg Gly Gly Asp Ile Thr Leu Arg
 225 230 235 240
 Cys Pro Val Met Leu Val Val Gly Asp Gln Ala Pro His Glu Asp Ala
 245 250 255
 Val Val Glu Cys Asn Ser Lys Leu Asp Pro Thr Gln Thr Ser Phe Leu
 260 265 270
 Lys Met Ala Asp Ser Gly Gly Gln Pro Gln Leu Thr Gln Pro Gly Lys

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      275              280              285
Leu Thr Glu Ala Phe Lys Tyr Phe Leu Gln Gly Met Gly Tyr Met Ala
   290              295              300
Ser Ser Cys Met Thr Arg Leu Ser Arg Ser Arg Thr Ala Ser Leu Thr
   305              310              315              320
Ser Ala Ala Ser Val Asp Gly Asn Arg Ser Arg Ser Arg Thr Leu Ser
              325              330              335
Gln Ser Ser Glu Ser Gly Thr Leu Ser Ser Gly Pro Pro Gly His Thr
      340              345              350
Met Glu Val Ser Cys
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<210> 2941

<211> 847

<212> DNA

<213> Homo sapiens

<400> 2941

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120
ggtgccagcc ccacagcccc ccagcatctc ttaaagcagg gtcagctctc ggccccgggg
180
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240
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300
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360
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420
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480
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540
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600
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660
ctgggggtgc tgcaggaccc ccaggcctga gccagcacc cgctccaccc cagccagctg
720
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780
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840
ggtgcac
847

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<210> 2942

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2942

Xaa Ala Leu Ser Ser Leu Arg Ala Leu Gly Ser Gln Asp Leu Pro Leu
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 Gly Gly Asn Ala Pro Cys Ile Leu Gln Leu Asp Leu Gln His Leu His
 20 25 30
 Gly Arg Gly His Asp His Leu Ala Gly Ala Ser Pro Thr Ala Arg Gln
 35 40 45
 His Leu Phe Lys Gln Gly Gln Leu Ser Ala Gln Gly Gly Ala Gln Pro
 50 55 60
 Ser Val Glu Ala Pro Ala Ala Pro Arg Pro Thr Ala Thr Gln Leu Thr
 65 70 75 80
 Arg Asp Leu Leu Arg Ser Arg Gly Ile Ala Gly Leu Tyr Lys Gly Leu
 85 90 95
 Gly Ala Thr Leu Leu Arg Asp Val Pro Phe Ser Val Val Tyr Phe Pro
 100 105 110
 Leu Phe Ala Asn Leu Asn Gln Leu Gly Arg Pro Ala Ser Glu Glu Lys
 115 120 125
 Ser Pro Phe Tyr Val Ser Phe Leu Ala Gly Cys Val Ala Gly Ser Ala
 130 135 140
 Ala Ala Val Ala Val Asn Pro Cys Asp Val Val Lys Thr Arg Leu Gln
 145 150 155 160
 Ser Leu Gln Arg Gly Val Asn Glu Asp Thr Tyr Ser Gly Ile Leu Asp
 165 170 175
 Cys Ala Arg Lys Ile Leu Arg His Glu Gly Pro Ser Ala Phe Leu Lys
 180 185 190
 Gly Ala Tyr Cys Arg Ala Leu Val Ile Ala Pro Leu Phe Gly Ile Ala
 195 200 205
 Gln Val Val Tyr Phe Leu Gly Ile Ala Glu Ser Leu Leu Gly Leu Leu
 210 215 220
 Gln Asp Pro Gln Ala
 225

<210> 2943

<211> 1501

<212> DNA

<213> Homo sapiens

<400> 2943

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 120
 tctagtgttt ggggtttctc gcggtcgtc aagatgaacc gactcttcgg gaaagcgaaa
 180
 cccaaggctc cgccgccag cctgactgac tgcattggca cggtggacag tagagcagaa
 240
 tccattgaca agaagatttc tcgattggat gctgagctag tgaagtataa ggatcagatc
 300
 aagaagatga gagaggggtc tgcaaagaat atggtcaagc agaaagcctt gcgagtttta
 360
 aagcaaaa ggaagtatga gcagcagcgg gacaatcttg ccaacagtca ttcaacatgg
 420
 aacgccaatt ataccatcca gtctttgaag gacaccaaga ccacggttga tgctatgaaa
 480

ctgggagtaa aggaaatgaa gaaggcatac aagcaagtga agatcgacca gattgaggat
 540
 ttacaagacc agctagagga tatgatggaa gatgcaaattg aaatccaaga agcactgagt
 600
 cgcagttatg gcacccaga actggatgaa gatgatttag aagcagagtt ggatgcacta
 660
 ggtgatgagc ttctggctga tgaagacagt tcttatttgg atgaggcagc atctgcaccc
 720
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 780
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 840
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 900
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 960
 agagactcat tgcttgggaa atgctttctt cgtactaaaa tttgattcct ttttttctta
 1020
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 1080
 taataatttg aaataaaaact aaggaaatgg aatcttaaaa gtctatgaca gtgtaactct
 1140
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 1200
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 1260
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 1320
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 1380
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 1500
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 1501

<210> 2944

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2944

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 Lys Lys Ile Ser Arg Leu Asp Ala Glu Leu Val Lys Tyr Lys Asp Gln
 35 40 45
 Ile Lys Lys Met Arg Glu Gly Pro Ala Lys Asn Met Val Lys Gln Lys
 50 55 60
 Ala Leu Arg Val Leu Lys Gln Lys Arg Met Tyr Glu Gln Gln Arg Asp
 65 70 75 80
 Asn Leu Ala Asn Ser His Ser Thr Trp Asn Ala Asn Tyr Thr Ile Gln

	85		90		95
Ser Leu Lys Asp Thr Lys Thr Thr Val Asp Ala Met Lys Leu Gly Val					
	100		105		110
Lys Glu Met Lys Lys Ala Tyr Lys Gln Val Lys Ile Asp Gln Ile Glu					
	115		120		125
Asp Leu Gln Asp Gln Leu Glu Asp Met Met Glu Asp Ala Asn Glu Ile					
	130		135		140
Gln Glu Ala Leu Ser Arg Ser Tyr Gly Thr Pro Glu Leu Asp Glu Asp					
	145		150		155
Asp Leu Glu Ala Glu Leu Asp Ala Leu Gly Asp Glu Leu Leu Ala Asp					
	165		170		175
Glu Asp Ser Ser Tyr Leu Asp Glu Ala Ala Ser Ala Pro Ala Ile Pro					
	180		185		190
Glu Gly Val Pro Thr Asp Thr Lys Asn Lys Asp Gly Val Leu Val Asp					
	195		200		205
Glu Phe Gly Leu Pro Gln Ile Pro Ala Ser					
	210		215		

<210> 2945

<211> 3331

<212> DNA

<213> Homo sapiens

<400> 2945

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120
cacagcatca ttattttctga ccaagtcccg agcgaccagg acgcacacca gtacctgagg
180
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240
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300
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360
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420
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<211> 463

<212> PRT

<213> Homo sapiens

<400> 2946

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Lys	Arg	Thr	Thr	Pro	Leu	Gln	Thr	His	Ser	Ile	Ile	Ile	Ser	Asp	Gln
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Val	Pro	Ser	Asp	Gln	Asp	Ala	His	Gln	Tyr	Leu	Arg	Leu	Arg	Asp	Gln
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Ser	Glu	Ala	Thr	Gln	Val	Met	Ala	Glu	Pro	Gly	Glu	Gly	Gly	Ser	Glu
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Lys Glu Val Met Glu Glu Gln Met Glu Val Glu Glu Gln Pro Pro Glu
210              215              220
Gly Glu Glu Ile Glu Val Ala Glu Glu Asp Arg Leu Glu Glu Glu Ala
225              230              235
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245              250              255
Pro Leu Glu Ala Ile Gln Leu Glu Leu Asp Thr Val Asn Ala Gln Ala
260              265              270
Asp Arg Ala Phe Gln Gln Leu Glu His Lys Phe Gly Arg Met Arg Arg
275              280              285
His Tyr Leu Glu Arg Arg Asn Tyr Ile Ile Gln Asn Ile Pro Gly Phe
290              295              300
Trp Met Thr Ala Phe Arg Asn His Pro Gln Leu Ser Ala Met Ile Arg
305              310              315
Gly Gln Asp Ala Glu Met Leu Arg Tyr Ile Thr Asn Leu Glu Val Lys
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Glu Leu Arg His Pro Arg Thr Gly Cys Lys Phe Lys Phe Phe Arg
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355              360              365
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Arg Gly His Glu Pro Gln Ser Phe Ile Arg Arg Asn Gln Asp Leu Ile
385              390              395
Cys Ser Phe Phe Thr Trp Phe Ser Asp His Ser Leu Pro Glu Ser Asp
405              410              415
Lys Ile Ala Glu Ile Ile Lys Glu Asp Leu Trp Pro Asn Pro Leu Gln
420              425              430
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<210> 2947

<211> 997

<212> DNA

<213> Homo sapiens

<400> 2947

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<210> 2948

<211> 332

<212> PRT

<213> Homo sapiens

<400> 2948

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Lys Pro Arg Ala Ser Gln Ser Thr Gln Ala His Glu Asn Ser Arg Asp
210              215              220
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225              230              235              240
Phe Asn Gln Met Arg Glu Arg Glu Val Lys Leu Trp Asp Thr Arg Phe
245              250              255
Phe Ser Ser Ala Leu Ala Ser Leu Thr Leu Asp Thr Ser Leu Gly Cys
260              265              270
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275              280              285
Lys Gly Glu Arg Gln Leu Tyr Cys Tyr Glu Val Val Pro Gln Gln Pro
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<211> 880

<212> DNA

<213> Homo sapiens

<400> 2949

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<211> 279

<212> PRT

<213> Homo sapiens

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<211> 3478

<212> DNA

<213> Homo sapiens

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<211> 493

<212> PRT

<213> Homo sapiens

<400> 2952

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<210> 2953

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<212> DNA

<213> Homo sapiens

<400> 2953

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<212> PRT

<213> Homo sapiens

<400> 2954

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			20					25					30		
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Val	Trp	Leu	Thr	Tyr	Trp	Val	Val	Tyr	Ala	Leu	Phe	Gly	Leu	Ala	Glu
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 <213> Homo sapiens

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 35 40 45
 Ile Asn Ser Tyr Phe Pro Ile Ser His Tyr Lys Gly His Thr Val Leu
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<212> PRT

<213> Homo sapiens

<400> 2958

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			20					25					30		
Ala	Ile	Val	Val	Ser	Val	Gly	Val	Asp	Glu	Glu	Ile	Val	Tyr	Ala	Lys
			35				40					45			
Ser	Thr	Ala	Leu	Gln	Thr	Trp	Leu	Phe	Gly	Tyr	Glu	Leu	Thr	Asp	Thr
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Lys Asn Gly Lys Lys Ile Gly Val Phe Ser Lys Asp Lys Phe Pro Gly
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Cys Ala Met Gly Ile Arg Phe Lys Ser Tyr Cys Ser Asn Leu Val Arg
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Tyr Lys Leu Lys Lys Gly Met Val Phe Ser Ile Asn Leu Gly Phe Ser
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Lys Gly Glu Gln Gln Ile Gln Lys Ala Arg Lys Ser Asn Val Ser Tyr
495

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<212> DNA
<213> Homo sapiens

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960

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<212> PRT

<213> Homo sapiens

<400> 2960

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 Gly Leu Lys Ile Ala Ala Lys His Tyr Gln Phe Ala Ser Gly Ala Phe
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<211> 434

<212> DNA

<213> Homo sapiens

<400> 2961

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<210> 2964
 <211> 115
 <212> PRT

<213> Homo sapiens

<400> 2964

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 Gly Gly Pro Gly Arg Val Trp Gly Thr Ser Leu His Val Val Gly Leu
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 Leu Met Val His Glu Trp Val Val Val Lys Gly Ala Val Trp Ala Gly
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<210> 2965

<211> 3739

<212> DNA

<213> Homo sapiens

<400> 2965

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<210> 2966

<211> 386

<212> PRT

<213> Homo sapiens

<400> 2966

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Pro	Glu	Ala	Glu	Ser	Lys	Gln	Thr	Glu	Lys	Asp	Pro	Gly	Val	Gln	Glu				
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<212> DNA
<213> Homo sapiens
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<400> 2967

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<210> 2968

<211> 126

<212> PRT

<213> Homo sapiens

<400> 2968

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35          40          45
Ile Ile Ala Val Val Leu Gly Val Ile Trp Gly Val Leu Pro Leu Arg
50          55          60
Gly Phe Leu Gly Ile Ala Gly Phe Cys Leu Ile Asn Ala Gly Val Leu

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Gly Thr Trp Glu Leu Thr Lys Glu Gly Phe Met Thr Ser Phe Ala Xaa
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<210> 2969

<211> 667

<212> DNA

<213> Homo sapiens

<400> 2969

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Ser Gln Thr Ile Met Ile Ala Trp Gly Ser Pro Ser Asn Arg Asp Phe
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Met Glu Thr Leu Asn Thr Leu Lys Tyr Ala Asn Arg Ala Arg Asn Ile
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Lys Asn Lys Val Val Val Asn Gln Asp Lys Thr Ala Ser Lys Ser Met

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<210> 2972

<211> 632

<212> PRT

<213> Homo sapiens

<400> 2972

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Lys Lys Met Lys Arg Lys Phe Tyr Ser Trp Glu Glu Cys Met Asn Leu
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Arg Glu Val Lys Ser Leu Lys Lys Leu Asn His Ala Asn Val Val Lys
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Leu Lys Glu Val Ile Arg Glu Asn Asp His Leu Tyr Phe Ile Phe Glu
 65          70          75          80
Tyr Met Lys Glu Asn Leu Tyr Gln Leu Ile Lys Glu Arg Asn Lys Leu
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Phe Pro Glu Ser Ala Ile Arg Asn Ile Met Tyr Gln Ile Leu Gln Gly
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Leu Ala Phe Ile His Lys His Gly Phe Phe His Arg Asp Leu Lys Pro
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Glu Asn Leu Leu Cys Met Gly Pro Glu Leu Val Lys Ile Ala Asp Phe
      130          135          140
Gly Leu Ala Arg Glu Ile Arg Ser Lys Pro Pro Tyr Thr Asp Tyr Val
      145          150          155          160
Ser Thr Arg Trp Tyr Arg Ala Pro Glu Val Leu Leu Arg Ser Thr Asn
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Tyr Ser Ser Pro Ile Asp Val Trp Ala Val Gly Cys Ile Met Ala Glu
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Val Tyr Thr Leu Arg Pro Leu Phe Pro Gly Ala Ser Glu Ile Asp Thr
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Ile Phe Lys Ile Cys Gln Val Leu Gly Thr Pro Lys Lys Thr Asp Trp
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Cys Val Pro Asn Asn Leu Lys Thr Leu Ile Pro Asn Ala Ser Ser Glu
      245          250          255
Ala Val Gln Leu Leu Arg Asp Met Leu Gln Trp Asp Pro Lys Lys Arg
      260          265          270
Pro Thr Ala Ser Gln Ala Leu Arg Tyr Pro Tyr Phe Gln Val Gly His
      275          280          285
Pro Leu Gly Ser Thr Thr Gln Asn Leu Gln Asp Ser Glu Lys Pro Gln
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Lys Gly Ile Leu Glu Lys Ala Gly Pro Pro Pro Tyr Ile Lys Pro Val
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Pro Pro Ala Gln Pro Pro Ala Lys Pro His Thr Arg Ile Ser Ser Arg
      325          330          335
Gln His Gln Ala Ser Gln Pro Pro Leu His Leu Thr Tyr Pro Tyr Lys
      340          345          350
Ala Glu Val Ser Arg Thr Asp His Pro Ser His Leu Gln Glu Asp Lys
      355          360          365
Pro Ser Pro Leu Leu Phe Pro Ser Leu His Asn Lys His Pro Gln Ser
      370          375          380
Lys Ile Thr Ala Gly Leu Glu His Lys Asn Gly Glu Ile Lys Pro Lys
      385          390          395          400
Ser Arg Arg Arg Trp Gly Leu Ile Ser Arg Ser Thr Lys Asp Ser Asp

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          405                      410                      415
Asp Trp Ala Asp Leu Asp Asp Leu Asp Phe Ser Pro Ser Leu Ser Arg
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Ile Asp Leu Lys Asn Lys Lys Arg Gln Ser Asp Asp Thr Leu Cys Arg
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Phe Glu Ser Val Leu Asp Leu Lys Pro Ser Glu Pro Val Gly Thr Gly
          450                      455                      460
Asn Ser Ala Pro Thr Gln Thr Ser Tyr Gln Arg Arg Asp Thr Pro Thr
          465                      470                      475                      480
Leu Arg Ser Ala Ala Lys Gln His Tyr Leu Lys His Ser Arg Tyr Leu
          485                      490                      495
Pro Gly Ile Ser Ile Arg Asn Gly Ile Leu Ser Asn Pro Gly Lys Glu
          500                      505                      510
Phe Ile Pro Pro Asn Pro Trp Ser Ser Ser Gly Leu Ser Gly Lys Ser
          515                      520                      525
Ser Gly Thr Met Ser Val Ile Ser Lys Val Asn Ser Val Gly Ser Ser
          530                      535                      540
Ser Thr Ser Ser Ser Gly Leu Thr Gly Asn Tyr Val Pro Ser Phe Leu
          545                      550                      555                      560
Lys Lys Glu Ile Gly Ser Ala Met Gln Arg Val His Leu Ala Pro Ile
          565                      570                      575
Pro Asp Pro Ser Pro Gly Tyr Ser Ser Leu Lys Ala Met Arg Pro His
          580                      585                      590
Pro Gly Arg Pro Phe Phe His Thr Gln Pro Arg Ser Thr Pro Gly Leu
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Ile Pro Arg Pro Pro Ala Ala Gln Pro Val His Gly Arg Thr Asp Trp
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<210> 2973

<211> 858

<212> DNA

<213> Homo sapiens

<400> 2973

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540

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 720
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<210> 2974

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2974

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 20 25 30
 Pro Ala Val Leu Glu Ser Ala Val Val Ser Ser Pro Asp Pro Ile Arg
 35 40 45
 Gly Glu Val Val Lys Ala Phe Ile Val Leu Thr Pro Ala Tyr Ser Ser
 50 55 60
 His Asp Pro Glu Ala Leu Thr Arg Glu Leu Gln Glu His Val Lys Arg
 65 70 75 80
 Val Thr Ala Pro Tyr Lys Thr Pro Arg Lys Val Ala Phe Val Ser Glu
 85 90 95
 Leu Pro Lys Thr Val Ser Gly Lys Ile Gln Arg Ser Lys Leu Arg Ser
 100 105 110
 Gln Glu Trp Gly Lys
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<210> 2975

<211> 1425

<212> DNA

<213> Homo sapiens

<400> 2975

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 360

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<211> 328

<212> PRT

<213> Homo sapiens

<400> 2976

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 35 40 45
 Pro Pro Gly Thr Pro Leu Val Ser Gln Asp Glu Lys Arg Asp Ala Glu
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 Leu Pro Lys Lys Arg Met Gly Lys Ser Asn Pro Gly Trp Glu Asn Leu
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<210> 2977

<211> 1420

<212> DNA

<213> Homo sapiens

<400> 2977

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<210> 2978

<211> 369

<212> PRT

<213> Homo sapiens

<400> 2978

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			20					25					30		
Asp	Pro	Asp	Gly	Ser	Trp	Ala	Gln	Ile	Ala	Glu	Lys	Arg	Ala	Val	Leu
		35					40					45			
Ala	His	Val	Asp	Val	Gln	Thr	Leu	Ser	Ser	Gln	Leu	Ala	Val	Thr	Val
		50				55				60					
Gly	Pro	Gly	Glu	Arg	Arg	Ile	Gly	Pro	Gly	Glu	Pro	Leu	Glu	Leu	Leu
65					70					75				80	
Cys	Asn	Val	Ser	Gly	Ala	Leu	Pro	Pro	Ala	Gly	Arg	His	Ala	Ala	Tyr
				85				90						95	
Ser	Val	Gly	Trp	Glu	Met	Ala	Pro	Ala	Gly	Ala	Pro	Gly	Pro	Gly	Arg
				100				105					110		
Leu	Val	Ala	Gln	Leu	Asp	Thr	Glu	Gly	Val	Gly	Ser	Leu	Xaa	Ala	Leu

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      165              170              175
Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val His Val Arg Glu
  180              185              190
Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala Gly Gly Thr Val
  195              200              205
Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile Ser Val Arg Gly
  210              215              220
Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp Val Glu Arg Pro
  225              230              235              240
Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu Val Gly Gly Val
      245              250              255
Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro Gly Gly Gly Pro
  260              265              270
Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg Leu Arg Leu His
  275              280              285
Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys Ala Pro Ser Ala
  290              295              300
Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala Gly Ser Ala Arg
  305              310              315              320
Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala Leu Asp Thr Leu
      325              330              335
Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu Val Thr Gly Ala
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<210> 2979

<211> 2191

<212> DNA

<213> Homo sapiens

<400> 2979

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420

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<210> 2980
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 2980
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 35 40 45
 Asn Ala Arg Arg Ala Arg Val Gly Arg Ala Glu Cys Leu Leu Ser Gly
 50 55 60
 Arg Pro Pro Thr Ala Val Leu Pro Arg Leu Val Glu Asn Leu Lys Ala
 65 70 75 80
 Arg Val Pro Val Pro Gly His Thr Glu Pro Leu Trp Ser Glu Gly Thr
 85 90 95
 Ala Pro Gly Gln Gly Leu Trp Ser His Ala Pro Ala Asp Gly Ser Leu
 100 105 110
 Met Asn Leu Ile Arg Thr Leu Val Gly Ala Val Val Phe Glu Leu Leu
 115 120 125
 Ser Met Cys Phe Gly Asp Gly Ala Gly Ala Ala Cys
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<210> 2981
 <211> 617
 <212> DNA
 <213> Homo sapiens

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<210> 2982

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2982

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Leu	Pro	Glu	Gln	Glu	Ala	Ala	Glu	Ala	Asp	Leu	Ser	Asn	Met	Glu	Arg
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Val	Ser	Leu	Ser	Thr	Ala	Asp	Pro	Gln	Gly	Val	Thr	Tyr	Ala	Glu	Leu
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Ser	Thr	Ser	Ala	Leu	Ser	Glu	Ala	Ala	Ser	Asp	Thr	Thr	Gln	Glu	Pro
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<210> 2983

<211> 614

<212> DNA

<213> Homo sapiens

<400> 2983

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<212> PRT

<213> Homo sapiens

<400> 2984

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 65             70             75             80
Thr Pro Gly Gly Val Gln Ile Gln Asp Ser Leu Pro Gln Val Val Asp
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130            135            140
Asn Lys Gly Asp Leu Leu His Ala Arg Gln Val Gln Thr Gln Asp Gly
145            150            155            160
Ile Gln Leu Ala Asn Glu Leu Gly Ser Leu Phe Leu Glu Ile Ser Thr
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<212> DNA

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<400> 2985

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<212> PRT

<213> Homo sapiens

<400> 2986

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			20					25					30		
Glu	Leu	Cys	Val	Lys	Leu	Met	Phe	Leu	His	Pro	Val	Asp	Tyr	Gly	Arg
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Lys	Ala	Glu	Glu	Leu	Leu	Trp	Arg	Lys	Val	Tyr	Tyr	Glu	Val	Ile	Gln
		50				55				60					
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				70						75				80	
Cys	Ala	Tyr	Arg	Thr	His	Leu	Val	Ala	Gly	Ile	Gly	Phe	Tyr	Gln	His
				85					90					95	
Leu	Leu	Leu	Tyr	Ile	Gln	Ser	His	Tyr	Gln	Leu	Glu	Leu	Gln	Cys	Cys
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      165              170              175
Leu Ser Val Ala Pro Gln Ile Gly Met Pro Phe Asn Gln Leu Gly Thr
      180              185              190
Leu Ala Gly Ser Lys Tyr Tyr Asn Val Glu Ala Met Tyr Cys Tyr Leu
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Pro Pro Arg Gly Arg Ser Glu Ala Pro Asp Ser Leu Asn Gly Pro Leu
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980

985

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 <212> DNA
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tcaaacaagt cttgctttgc tccatcttct tcttcagagt ctgtactttc ctactgtctt
900
gtactccccg agctggatcg tctttgggat tctggtgtga atgcgatgtg cttttctccc
960
catatatctt cctcatcaga
980

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<210> 2992

<211> 64

<212> PRT

<213> Homo sapiens

<400> 2992

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Val Val Ala Val Cys Ser Pro Gln Ser Ala Ala Ala Asp Val Thr Arg
1           5           10          15
His Thr Gly Pro Phe Thr Glu Val Ser Pro Gly Ala Leu Gly Trp Pro
20          25          30
Val Leu Cys Ser Gly Leu Leu Leu Gly Leu Gly Ala Ala His Phe
35          40          45
Ala Ser Ala Val Ser Gly His Ser Ser Ala Ser Leu Gln Ala Ala Ser
50          55          60

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<210> 2993

<211> 687

<212> DNA

<213> Homo sapiens

<400> 2993

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nnatgccccg ggtccaggga gccgctgatg gtcactgaag ctgtggccct agagcggcgg
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cgggagcagg aagaaaagga ggacatggag acccaggctg tggcaacgtc ccccgatggc
120
cgatacctca agtttgacat cgagattgga cgtggctcct tcaagacggt gtatcgaggg
180
ctagacaccg acaccacagt ggaggtggcc tgggtgtgagc tgcagactcg gaaactgtct
240
agagctgagc ggcagcgctt ctacagaggag gtggagatgc tcaaggggct gcagcaccgc
300
aacatcgtcc gctcttatga ttcgtggaag tcggtgctga ggggccagggt ttgcatcgtg
360
ctggtcaccg aactcatgac ctccggcacg ctcaagacgt acctgaggcg gttccgggag
420
atgaagccgc gggtccttca gcgctggagc cgccaaatcc tgcggggact tcatttctca
480
cactccccgg ttctctccat cctgcaccgg gatctcaagt gcgacaatgt ctttatcacg
540
ggacctactg gctctgtcaa aatcggggac ctgggcctggt ccacgctcaa gcgcgctcc
600
tttgccaaga gtgtcatcgg gaccccgga ttcattggccc ccgagatgta cgaggaaaaa
660

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tacgatgagg ccgtggacgt gtacgcg
687

<210> 2994

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2994

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Xaa Cys Pro Arg Ser Arg Glu Pro Leu Met Val Thr Glu Ala Val Ala
 1           5           10           15
Leu Glu Arg Arg Arg Glu Gln Glu Glu Lys Glu Asp Met Glu Thr Gln
           20           25           30
Ala Val Ala Thr Ser Pro Asp Gly Arg Tyr Leu Lys Phe Asp Ile Glu
           35           40           45
Ile Gly Arg Gly Ser Phe Lys Thr Val Tyr Arg Gly Leu Asp Thr Asp
           50           55           60
Thr Thr Val Glu Val Ala Trp Cys Glu Leu Gln Thr Arg Lys Leu Ser
           65           70           75           80
Arg Ala Glu Arg Gln Arg Phe Ser Glu Glu Val Glu Met Leu Lys Gly
           85           90           95
Leu Gln His Pro Asn Ile Val Arg Phe Tyr Asp Ser Trp Lys Ser Val
           100          105          110
Leu Arg Gly Gln Val Cys Ile Val Leu Val Thr Glu Leu Met Thr Ser
           115          120          125
Gly Thr Leu Lys Thr Tyr Leu Arg Arg Phe Arg Glu Met Lys Pro Arg
           130          135          140
Val Leu Gln Arg Trp Ser Arg Gln Ile Leu Arg Gly Leu His Phe Leu
           145          150          155          160
His Ser Arg Val Pro Pro Ile Leu His Arg Asp Leu Lys Cys Asp Asn
           165          170          175
Val Phe Ile Thr Gly Pro Thr Gly Ser Val Lys Ile Gly Asp Leu Gly
           180          185          190
Leu Ala Thr Leu Lys Arg Ala Ser Phe Ala Lys Ser Val Ile Gly Thr
           195          200          205
Pro Glu Phe Met Ala Pro Glu Met Tyr Glu Glu Lys Tyr Asp Glu Ala
           210          215          220
Val Asp Val Tyr Ala
225

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<210> 2995

<211> 1879

<212> DNA

<213> Homo sapiens

<400> 2995

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nttttagtagt agtattacat tgtgaatttt attttcaaat ttgatcaata aagatgaaaa
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taataaaatt aagcagtc aaagaagtagc aaaaacaaga tagtcattca tatatacaga
120
acatatagat tcatttctag ttgattcaat cctatttatg tatttaaaat aaaaaataat
180
ggccatctgg ctagtgtcaa cggtagagca tgagactctt aaaaatacaa atacatctta
240

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atgtgtcaag aagaccacag ttagcaccag gaaaggaact ttacttttagc ttctgattac
300
ttttttatTT ttattttttac tttattatta ttattattat ttttgagatg gagtctcact
360
ctgntcaccC aggctggaat acagtgggtg gatctcagct cactgcaacc tccacctccc
420
aggttcaagc gattctcctg cctcagcctc ctgagtagct gggactctga tagatgcctg
480
ccaccacacc cgggtgattt ttgtattttt agtagagacg ggggttcgcc atgttgctca
540
ggctgggtct gaactcccga cctcaagtga cttgctcacc ttggcctccc aaagtgcctg
600
gattacaggt gtgagccact gcaccacgac tggcagtcaa ttttaagcct cctatttccc
660
aggtttttagc ttaataatcc tcattagttt ttcagatttt tgtcagtcct gttttggggc
720
tattttgcct tagtgggcct aaacagaata ttaaaataca ttaataatcc atactgagag
780
tagagtataa atgggtttct cactccttag ggacacgagt ggaacaata catcccatga
840
acacaggtga atgtccctgg ttatccctga gctgggcagt ttcacacaat cttttttct
900
ctgaggccaa agtctgtggt ttgatcatct tagcagcttc cagaacagaa agtaggttta
960
ctttgtctcc aaattctttt tctcggtgct caagaagaat gccctgcttt cctgatccca
1020
ccacgaaaac tcccccaagg atgaagcctt ctccttcag gtttcagag aagcctccgt
1080
tccaggctcg gaagaagttg taccacactc ccagacggat aaatcccata aacatcatct
1140
tccgcctttg tggaccatag aactttttct tttcatccag gaagattttc ctttgaaat
1200
aaggctggaa atccttcaact tcagtctctga tgtgctcctt taccactgca tagaggggga
1260
cgccccagct gtccaacatg cttttcaggg aggacagatc cgcagcttcc tctcgacaga
1320
ggaaaacagc tggcctccgc acggccataa tcacagctcc atttttttcc catagctcct
1380
ttgctttgaa agtctctggc tcctttctcca gtgttttcag gtctatatcc tccaggtaact
1440
ccagggccgc tttctggggc ttggacagaa acacgtctgt gttggcaagc agcaatgccaa
1500
aggcagcagc cccagggt cctgcaccaa tggaccacat ccccatgggt aagaaacttg
1560
ggtcctggag gaaagacatt tctcaagtgc ctccttctg ccggcctttt accgccccga
1620
cgcccgggcg ctaagggggc aaaccgcccg gcccgagggt tcccaggggc gggccccgga
1680
gtactctggag gatatagacc tgaaaacact ggagaaggaa ccaaggactt tcaagcaaa
1740
ggagctatgg gaaaaaaatg gagctgtgat tatggccgtg cggaggccag gctgtttcct
1800
ctgtcgagag gaagctgctg atctgtcctc cctgaaaagc atgttggacc agctgggcgt
1860

ccccctctat gcagtggta
1879

<210> 2996
<211> 101
<212> PRT
<213> Homo sapiens

<400> 2996
His Gln Glu Arg Asn Phe Thr Leu Ala Ser Asp Tyr Phe Phe Ile Phe
1 5 10 15
Ile Phe Thr Leu Leu Leu Leu Leu Phe Leu Arg Trp Ser Leu Thr
20 25 30
Leu Xaa Thr Gln Ala Gly Ile Gln Trp Cys Asp Leu Ser Ser Leu Gln
35 40 45
Pro Pro Pro Pro Arg Phe Lys Arg Phe Ser Cys Leu Ser Leu Ser
50 55 60
Ser Trp Asp Ser Asp Arg Cys Leu Pro Pro His Pro Gly Asp Phe Cys
65 70 75 80
Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Cys Ser Gly Trp Ser Arg
85 90 95
Thr Pro Asp Leu Lys
100

<210> 2997
<211> 800
<212> DNA
<213> Homo sapiens

<400> 2997
actcagatgg gcaccatcag tgctagacaa gaattctatt cctcttatcc aggcctccca
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gagccatcca aagtgcacatc tccagtgggc acctcttcca ccataaaaga cattgtttct
120
acaaccatac ctgcttcttc tgagataaca agaattgaga tggagtgcaac atcccacctg
180
acccccacac caaggagac cagcacctcc caggagatcc actcagccac aaagccaagc
240
actgttctctt acaaggcact cactagtgcc acgattgagg actccatgac acaagtcattg
300
tcctctagca gaggacctag ccctgatcag tccacaatgt cacaagacat atccactgaa
360
gtgatcacca ggctctctac ctccccatc aagacagaat ctacagaaat gaccattacc
420
accctaaacag ggtctcctgg ggctacatca aggggtaccc ttaccttgga cacttcaaca
480
actttttatgt cagggaacca ctcaactgca tctcaaagat ttccacatc acagatgacc
540
gtctttatga gtagaactcc tggagatgtg ccatggctaa cccatccctc tggggaagag
600
ccgcctctg cctctttctc actggcttca cctgtcttga cctcattttt ttctgttttt
660
gcccatccc aaaaacctcc accttttttg gtctctgggc aaacttttcc cctagggctg
720

gggaaaccca aaatgtgggg ccaaccaga actgaaacat tcccccaat ggacaacctt
780

tttgaaaagg gccctttgc

800

<210> 2998

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2998

Thr	Gln	Met	Gly	Thr	Ile	Ser	Ala	Arg	Gln	Glu	Phe	Tyr	Ser	Ser	Tyr
1				5					10					15	
Pro	Gly	Leu	Pro	Glu	Pro	Ser	Lys	Val	Thr	Ser	Pro	Val	Val	Thr	Ser
			20					25					30		
Ser	Thr	Ile	Lys	Asp	Ile	Val	Ser	Thr	Thr	Ile	Pro	Ala	Ser	Ser	Glu
		35				40						45			
Ile	Thr	Arg	Ile	Glu	Met	Glu	Ser	Thr	Ser	Thr	Leu	Thr	Pro	Thr	Pro
	50					55					60				
Arg	Glu	Thr	Ser	Thr	Ser	Gln	Glu	Ile	His	Ser	Ala	Thr	Lys	Pro	Ser
65				70						75				80	
Thr	Val	Pro	Tyr	Lys	Ala	Leu	Thr	Ser	Ala	Thr	Ile	Glu	Asp	Ser	Met
				85					90					95	
Thr	Gln	Val	Met	Ser	Ser	Ser	Arg	Gly	Pro	Ser	Pro	Asp	Gln	Ser	Thr
		100						105					110		
Met	Ser	Gln	Asp	Ile	Ser	Thr	Glu	Val	Ile	Thr	Arg	Leu	Ser	Thr	Ser
		115					120					125			
Pro	Ile	Lys	Thr	Glu	Ser	Thr	Glu	Met	Thr	Ile	Thr	Thr	Gln	Thr	Gly
	130					135						140			
Ser	Pro	Gly	Ala	Thr	Ser	Arg	Gly	Thr	Leu	Thr	Leu	Asp	Thr	Ser	Thr
145				150						155				160	
Thr	Phe	Met	Ser	Gly	Thr	His	Ser	Thr	Ala	Ser	Gln	Arg	Phe	Ser	His
			165					170						175	
Ser	Gln	Met	Thr	Ala	Leu	Met	Ser	Arg	Thr	Pro	Gly	Asp	Val	Pro	Trp
		180						185					190		
Leu	Thr	His	Pro	Ser	Gly	Glu	Glu	Pro	Ala	Ser	Ala	Ser	Phe	Ser	Leu
	195						200					205			
Ala	Ser	Pro	Val	Leu	Thr	Ser	Phe	Phe	Ser	Phe	Phe	Ala	His	Ser	Gln
	210					215					220				
Lys	Pro	Pro	Pro	Phe	Leu	Val	Pro	Gly	Gln	Thr	Phe	Ser	Leu	Gly	Leu
225				230						235				240	
Gly	Lys	Pro	Lys	Met	Trp	Gly	Gln	Pro	Arg	Thr	Glu	Thr	Phe	Pro	Pro
			245						250					255	
Met	Asp	Asn	Leu	Phe	Glu	Lys	Gly	Pro	Phe						
			260					265							

<210> 2999

<211> 550

<212> DNA

<213> Homo sapiens

<400> 2999

cccgaggagct gtcacagccc agctgagtgt gcacatgctc ggggtagtgc tgacatgcca
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acccccttgc cactttggcc cccctccaggc tttgggcact gacaagcatg ggaaggaggc
 120
 tgaggggtgc actgaggaca gccctagtgt ggctgcagg cacccttaa catgaacagc
 180
 ctggtcacca tgaacagcag caggaggcag acaggctcct ggggtgaaag aagctggctc
 240
 acagtgaaga cccacctcca agccaggga agcctgaagc ctgggggatg ggtcgccagt
 300
 cccagaaacc gcaagggcaa cttgtggtgc tttccctgg gccccaccat ggccgcccac
 360
 ggacgaattg gcatgcactt tctcccctct gagggccata aaagcccctg ggctcagcca
 420
 gagctgagcg gatatcagga cgacaagctg cacagaggta ctaccatac caaggcctcc
 480
 tctctgtgta gagctgcaca tacaatggaa tgacctgcct gtagagagag cttccactc
 540
 cagggtctcc
 550

<210> 3000

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3000

Met Cys Ser Ser Gln Arg Gly Gly Leu Gly Met Gly Ser Thr Ser
 1 5 10 15
 Val Gln Leu Val Val Leu Ile Ser Ala Gln Leu Trp Leu Ser Pro Gly
 20 25 30
 Ala Phe Met Gly Leu Arg Gly Glu Lys Val His Ala Asn Ser Ser Met
 35 40 45
 Gly Gly His Gly Trp Ala Gln Gly Lys Ala Pro Gln Val Ala Leu Ala
 50 55 60
 Val Ser Gly Thr Gly Asp Pro Ser Pro Arg Leu Gln Ala Phe Pro Gly
 65 70 75 80
 Leu Glu Val Gly Leu His Cys Gly Pro Ala Ser Phe His Pro Gly Ala
 85 90 95
 Cys Leu Pro Pro Ala Ala Val His Gly Asp Gln Ala Val His Val Lys
 100 105 110
 Gly Cys Leu Gln Ala Ser Thr Gly Leu Ser Ser Val His Pro Ser Ala
 115 120 125
 Ser Phe Pro Cys Leu Ser Val Pro Lys Ala Trp Arg Gly Pro Lys Trp
 130 135 140
 Gln Gly Gly Trp His Val Ser Thr Thr Pro Ser Met Cys Thr Leu Ser
 145 150 155 160
 Trp Ala Val Thr Ala Pro Gly
 165

<210> 3001

<211> 1092

<212> DNA

<213> Homo sapiens

<400> 3001

agatctttgt gaggcctgaa tgaaatggcc ccattcagaa ttccccagga tgtcatccat
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 aatagctctg cctggctgag ttgaaaggc cactgttctg ttccagcgtt gagatgcctt
 120
 gaagtacaga ggttgagccc ctatgtatgc ctgggggagt cccagaaagt ggaatcccaa
 180
 ccttgctcag ctccaccagt tttcttctat aaccagaca ttgcaaagac agcagtaccc
 240
 actgaggcat ccagcccagc tcaggccctg ccaccnca gtaccaagc atcattgtca
 300
 ggcaagggat acagaacaca gtgctctcac cagactgcag ctggggggac acccagcacg
 360
 gagagaagct gaggcggaac tgcactatct accggccctg gttctccccc tacagctact
 420
 tcgtgtgtgc agacaagag agccagctgg aggcctatga cttcccagag gtgcagcagg
 480
 atgaggggcaa gtgggacaac tgcctttctg aggacatggc tgagaacatc tgttcgtcct
 540
 cttcctcccc agagaacact tgcctctcag aagccaccaa gaaatccagg catggcctgg
 600
 actccatcac atcccaggac atcctaattg cttccagggt gaccccagca cagcagaatg
 660
 gctacaagtg cgtggcctgc tgcgcgatgt accccaccct ggacttcctc aagagccaca
 720
 tcaagagggg cttcaggggg ggcttcagct gcaaggtgta ctaccgcaag ctcaaagccc
 780
 tctggagcaa ggagcagaag gcccggtctg gagacaggct ctctccggc agctgccagg
 840
 ccttcaatag tcctgctgaa caccttaggc aaattggcgg tgaagcctac ttatgtctct
 900
 agagagatgc caataaagtt agtcacagcc ttctgtccag tctgaggta cccgcacag
 960
 cctgtgtctc tcccagaac ccggtctca tcaccttgg ctaattggtg ctagcaaca
 1020
 ccaggcacac accctccctt ttctctcttt taaaaataaa gacaatactt gaagtttggg
 1080
 aaaatcaaaa aa
 1092

<210> 3002

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3002

Met	Ala	Pro	Phe	Arg	Ile	Pro	Gln	Asp	Val	Ile	His	Asn	Ser	Ser	Ala
1				5					10					15	
Trp	Leu	Ser	Leu	Lys	Gly	His	Cys	Ser	Val	Ser	Ala	Leu	Arg	Cys	Leu
			20					25					30		
Glu	Val	Gln	Arg	Leu	Ser	Pro	Tyr	Val	Cys	Leu	Gly	Glu	Ser	Gln	Lys
		35				40					45				
Val	Glu	Ser	Gln	Pro	Cys	Ser	Ala	His	Gln	Cys	Phe	Phe	Tyr	Asn	Pro
	50				55				60						
Asp	Ile	Ala	Lys	Thr	Ala	Val	Pro	Thr	Glu	Ala	Ser	Ser	Pro	Ala	Gln

```

65              70              75              80
Ala Leu Pro Pro Xaa Ser Thr Lys Ala Ser Leu Ser Gly Lys Gly Tyr
              85              90              95
Arg Thr Gln Cys Ser His Gln Thr Ala Ala Trp Gly Thr Pro Ser Thr
              100              105              110
Glu Arg Ser
              115

```

```

<210> 3003
<211> 474
<212> DNA
<213> Homo sapiens

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<400> 3003
gcgcgccatg gagccccggg cgggttcaga agccgtggag acgggtgagg aggatgtgat
60
tatggaagct ctgcggtcat acaaccagga gcactcccag agcttcacgt ttgatgatgc
120
ccaacaggag gaccggaaga gactggcgga gctgctggtc tccgtcctgg aacagggctt
180
gccaccctcc caccgtgtca tctggctgca gagtgtccga atcctgtccc gggaccgcaa
240
ctgcctggac ccgttcacca gcgcgcagag cctgcaggca ctacgtctgt atgctgacat
300
ctctgtctct gaggggtccg tcccagagtc cgcagacatg gatgtgttac tggagtccct
360
caagtgcctg tgcaacctcg tgctcagcag cctgtggca cagatgctgg cagcagaggc
420
ccgcctagtg gtgaagctca cagagcgtgt ggggctgtac cgtgagagga gctc
474

```

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<210> 3004
<211> 155
<212> PRT
<213> Homo sapiens

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<400> 3004
Met Glu Pro Arg Ala Val Ala Glu Ala Val Glu Thr Gly Glu Glu Asp
1              5              10              15
Val Ile Met Glu Ala Leu Arg Ser Tyr Asn Gln Glu His Ser Gln Ser
20              25              30
Phe Thr Phe Asp Asp Ala Gln Gln Glu Asp Arg Lys Arg Leu Ala Glu
35              40              45
Leu Leu Val Ser Val Leu Glu Gln Gly Leu Pro Pro Ser His Arg Val
50              55              60
Ile Trp Leu Gln Ser Val Arg Ile Leu Ser Arg Asp Arg Asn Cys Leu
65              70              75              80
Asp Pro Phe Thr Ser Arg Gln Ser Leu Gln Ala Leu Ala Cys Tyr Ala
85              90              95
Asp Ile Ser Val Ser Glu Gly Ser Val Pro Glu Ser Ala Asp Met Asp
100              105              110
Val Val Leu Glu Ser Leu Lys Cys Leu Cys Asn Leu Val Leu Ser Ser
115              120              125
Pro Val Ala Gln Met Leu Ala Ala Glu Ala Arg Leu Val Val Lys Leu

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130 135 140
 Thr Glu Arg Val Gly Leu Tyr Arg Glu Arg Ser
 145 150 155

<210> 3005
 <211> 799
 <212> DNA
 <213> Homo sapiens

<400> 3005
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 60
 gacaacagtg acaacgtgga actcaagttc aatctggacc agtacgtcaa caagcggtag
 120
 ccaggcctcg tgaagattgt ccgcaacagc cggcgggaag gactgatccg cgcgcggtg
 180
 cagggtcgga aggcggccac cgccccagtc gtcggcttct ttgatgccca cgctcagttc
 240
 aacacgggct gggccgagcc cgcactgtcg cggatccgag aggaccggcg tcgcatcgtg
 300
 ctgccagcca tcgacaacat caagtacagc acgtttgagg tgcagcagta tgcgaacgcc
 360
 gccatggct acaactgggg cctctggtgc atgtacatca tcccccgca ggactggctg
 420
 gaccgcggtg acgagtcagc acccatcagg accccagcca tgatcggtg ctccttcgta
 480
 gtggaccgag agtacttcgg agacattggg ctgctggacc ccggcatgga ggtgtatggc
 540
 ggcgagaacg tagaactggg catgaggggtg tggcagtggt gcggcagcat ggaggtgctg
 600
 ccctgctccc gcgtggccca catcgagcgc accaggaagc cctacaacaa cgacattgac
 660
 tactacgcca agcgcaacgc cctgcgcacc gccgaggtgt ggatggatga cttcaagtcc
 720
 cagctgtaca tggcctggaa catccccatg tcgaaccagc ggggtggactt cggggacgtg
 780
 tctgagaggc tggccctgc
 799

<210> 3006
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 3006
 Val His Ser Val Val Asn His Thr Pro Ser Gln Leu Leu Lys Glu Val
 1 5 10 15
 Ile Leu Val Asp Asp Asn Ser Asp Asn Val Glu Leu Lys Phe Asn Leu
 20 25 30
 Asp Gln Tyr Val Asn Lys Arg Tyr Pro Gly Leu Val Lys Ile Val Arg
 35 40 45
 Asn Ser Arg Arg Glu Gly Leu Ile Arg Ala Arg Leu Gln Gly Trp Lys
 50 55 60
 Ala Ala Thr Ala Pro Val Val Gly Phe Phe Asp Ala His Val Glu Phe

```

65          70          75          80
Asn Thr Gly Trp Ala Glu Pro Ala Leu Ser Arg Ile Arg Glu Asp Arg
      85          90          95
Arg Arg Ile Val Leu Pro Ala Ile Asp Asn Ile Lys Tyr Ser Thr Phe
      100          105          110
Glu Val Gln Gln Tyr Ala Asn Ala Ala His Gly Tyr Asn Trp Gly Leu
      115          120          125
Trp Cys Met Tyr Ile Ile Pro Pro Gln Asp Trp Leu Asp Arg Gly Asp
      130          135          140
Glu Ser Ala Pro Ile Arg Thr Pro Ala Met Ile Gly Cys Ser Phe Val
      145          150          155
Val Asp Arg Glu Tyr Phe Gly Asp Ile Gly Leu Leu Asp Pro Gly Met
      160          165          170          175
Glu Val Tyr Gly Gly Glu Asn Val Glu Leu Gly Met Arg Val Trp Gln
      180          185          190
Cys Gly Gly Ser Met Glu Val Leu Pro Cys Ser Arg Val Ala His Ile
      195          200          205
Glu Arg Thr Arg Lys Pro Tyr Asn Asn Asp Ile Asp Tyr Tyr Ala Lys
      210          215          220
Arg Asn Ala Leu Arg Thr Ala Glu Val Trp Met Asp Asp Phe Lys Ser
      225          230          235          240
His Val Tyr Met Ala Trp Asn Ile Pro Met Ser Asn Pro Gly Val Asp
      245          250          255
Phe Gly Asp Val Ser Glu Arg Leu Ala Leu
      260          265

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<210> 3007

<211> 536

<212> DNA

<213> Homo sapiens

<400> 3007

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cttaagagag gttgcaatgt gaatgataga gatggattga cagatatgac tcttttacat
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tatactctgca aatctggagc tcatggtatt ggtgatgtgg aaacagctgt aaaatttgca
120
actcagctta ttgacctggg agcagacatt agtttgcgga gtcgctggac aaacatgaat
180
gctttgcatt atgctgctta ttttgatgct cctgaactta taagagtgat tttgaaaaca
240
tcgaaaccaa aagatgtgga tgccccttgc agtgatttta attttggaac agctttgcatt
300
attgcagcat acaacttgtg tgcaggtgct gtgaagtgcc tcttgaggca gggagcaaat
360
cctgcattta ggaatgacaa aggacagatc cctgctgatg ttgttcaga cccagtagat
420
atgccggttag agatggctga cgccgcagcc actgctaagg aaatcaagca gatgcttcta
480
gatgcggtgc ctctgtcatg taacatctca aaggccatgc tcccccttc acgcgt
536

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<210> 3008

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3008

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Met Thr Leu Leu His Tyr Thr Cys Lys Ser Gly Ala His Gly Ile Gly
 1           5           10           15
Asp Val Glu Thr Ala Val Lys Phe Ala Thr Gln Leu Ile Asp Leu Gly
      20           25           30
Ala Asp Ile Ser Leu Arg Ser Arg Trp Thr Asn Met Asn Ala Leu His
      35           40           45
Tyr Ala Ala Tyr Phe Asp Val Pro Glu Leu Ile Arg Val Ile Leu Lys
      50           55           60
Thr Ser Lys Pro Lys Asp Val Asp Ala Pro Cys Ser Asp Phe Asn Phe
      65           70           75           80
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Lys Cys Leu Leu Glu Gln Gly Ala Asn Pro Ala Phe Arg Asn Asp Lys
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Gly Gln Ile Pro Ala Asp Val Val Pro Asp Pro Val Asp Met Pro Leu
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<210> 3009

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<212> DNA

<213> Homo sapiens

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<211> 310

<212> PRT

<213> Homo sapiens

<400> 3010

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<212> DNA

<213> Homo sapiens

<400> 3011

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Leu	Glu	Gln	Asp	Thr	Gln	Gly	Leu	Asp	Gly	Trp	Trp	Leu	Cys	Ser	Leu
			35				40					45			
His	Gly	Arg	Gln	Gly	Ile	Val	Pro	Gly	Asn	Arg	Leu	Lys	Ile	Leu	Val
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Gly	Met	Tyr	Asp	Lys	Lys	Pro	Ala	Gly	Pro	Gly	Ser	Gly	Pro	Pro	Ala
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Thr	Pro	Ala	Gln	Pro	Gln	Pro	Gly	Leu	His	Ala	Pro	Ala	Pro	Pro	Ala
			85					90						95	
Ser	Gln	Tyr	Thr	Pro	Met	Leu	Pro	Asn	Thr	Tyr	Gln	Pro	Gln	Pro	Asp
			100					105					110		
Ser	Val	Tyr	Leu	Val	Pro	Thr	Pro	Ser	Lys	Ala	Gln	Gln	Gly	Leu	Tyr
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Gln	Val	Pro	Gly	Pro	Ser	Pro	Gln	Phe	Gln	Ser	Pro	Pro	Ala	Lys	Gln
			130				135				140				
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 660 665 670
 Glu Glu Phe Glu Lys Thr Gln Lys Glu Leu Leu Glu Lys Gly Asn Ile
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4380
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4440

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 4560
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<210> 3018

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3018

Cys	His	Leu	Glu	Gln	Val	His	Leu	Lys	Pro	Ile	Pro	Lys	Asp	Thr	Pro
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Thr	Thr	Pro	Thr	Pro	Thr	Leu	Ala	Cys	Pro	Ser	Pro	Gln	Cys	Ala	Phe
			20					25				30			
Gln	Arg	Trp	Ile	Thr	Ile	Gln	His	Arg	Trp	Ser	Ser	Ala	Leu	His	Cys
		35				40						45			
Gln	Gly	Leu	Thr	Pro	Thr	Pro	Gly	Ala	Leu	Pro	Asn	Tyr	Leu	Lys	Val
		50				55				60					
Lys	Ala	Asn	Arg	Ala	Ile	Pro	Gln	Ala	Val	Thr	Ser	Thr	Arg	Leu	Gly
65					70				75					80	
Thr	Thr	Lys	Pro	Pro	Cys	Thr	Ile	Thr	Pro	Pro	Cys	Arg	Ala	Val	Arg
				85					90					95	
Ser	Thr	Ser	Pro	Arg	Leu	Pro	Thr								
															100

<210> 3019

<211> 882

<212> DNA

<213> Homo sapiens

<400> 3019

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 120
 gcgctgtgtc cgtcgccatg acagatcaga cctattgtga ccgcttggtg caggacacgc
 180
 ctttctgac aggccatggg cgcttgagtg agcagcaggt ggacaggatc atcctccagc
 240
 tgaaccgtta ctaccacag atccttacca acaaggaggc gaaaagggtg ctgaggagtt
 300
 ccggaacccc aaggcatcct tgcgtgtgcg gctctgtgac ctctcagacc acctcagcg
 360
 gagctgtgag cgggactgcc aggagttcta ccgagccctg tatatccatg cccagccctt
 420

gcacagccgc ctgccagcc gccacgtctc gcagaactca gattgcacag agctagactc
 480
 gggcagccag agcggcgagc tgagtaacag gggacccatg agcttctctg ctggcctggg
 540
 ccttgctgtg ggactggccc tgctcctgta ctgctatccg ccagacccca agggcctggc
 600
 agggaccggg cgcgtcctcg gtttctcgcc tgtcatcatc gacagacatg tcagccgcta
 660
 cctgctggcc ttctctggcag atgacctagg ggggctctga cagacctgg acccagggcc
 720
 tcacctgcca ctcaacaaa gagtcctcga gccggcccg ccaaggggact gctgcttctt
 780
 tttctaaatg catatttttc attatttata atttggttaa aaaacacacc ttacacctta
 840
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 882

<210> 3020

<211> 58

<212> PRT

<213> Homo sapiens

<400> 3020

Gln	Gly	Thr	His	Glu	Leu	Pro	Gly	Trp	Pro	Gly	Pro	Cys	Cys	Gly	Thr
1				5				10				15			
Gly	Pro	Ala	Pro	Val	Leu	Leu	Ser	Ala	Arg	Pro	Gln	Gly	Pro	Ala	Arg
			20				25					30			
Asp	Pro	Ala	Arg	Pro	Arg	Phe	Leu	Ala	Cys	His	His	Arg	Gln	Thr	Cys
			35				40					45			
Gln	Pro	Leu	Pro	Ala	Gly	Leu	Pro	Gly	Arg						
	50					55									

<210> 3021

<211> 1008

<212> DNA

<213> Homo sapiens

<400> 3021

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 120
 gggcatgtgg gtgccttggg gtagggtaaa ggttccatct tgatcgcggt ggtgtttccc
 180
 aagtgtatac actcacaaa actatactta gaactcaaaa ctgcaccaat atatacttaa
 240
 aatggatgca gttggttatg tataaattat acctcaataa agttgattaa aaacatcaat
 300
 tcctcagaaa attcttttct gaccactccc ctctcagacg aggtcgggcc tcctgggtatg
 360
 catacccata cccactacaa cctgtattta ttttttttga aacatggctc ctttctgtcg
 420
 tccaggctgg agtgagtggt cgcaatcatg gatcactgca gccttgacct tcctggctca
 480

agtgcctc cggctcacc cccagtagct ggaaccacag gcgcgttcc acaccggaaa
 540
 gccattttc tagaggcgga aaccgaagcg cccagtggga aaggcgacc gccggggatg
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 660
 tccgcggact acggttctgg ctgcctagct ctggaaggga gcaccgggag ggaatggtg
 720
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 840
 ggactcgcgc agacgggaag caggcgcgtg ctggcggtga cctggggccg gagaggaacg
 900
 ctgggtcccc tccttgggag ttgccaccat tccctcccg tgctcccttc cagagctagc
 960
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 1008

<210> 3022

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3022

Met	His	Thr	His	Thr	His	Tyr	Asn	Leu	Tyr	Leu	Phe	Phe	Leu	Lys	His
1				5				10					15		
Gly	Leu	Phe	Leu	Ser	Ser	Arg	Leu	Glu	Cys	Ser	Gly	Ala	Ile	Met	Asp
			20				25						30		
His	Cys	Ser	Leu	Asp	Leu	Pro	Gly	Ser	Ser	Asp	Pro	Pro	Gly	Ser	Pro
			35				40					45			
Pro	Val	Ala	Gly	Thr	Thr	Gly	Ala	Leu	Pro	His	Arg	Lys	Ala	His	Phe
			50			55					60				
Leu	Glu	Ala	Glu	Thr	Glu	Ala	Pro	Ser	Gly	Lys	Gly	Asp	Pro	Pro	Gly
			65		70					75				80	
Met	Arg	Gly	Ala	Gln	Arg	Ala	Ala	Thr	Trp	Gly	Pro	Thr	Arg		
				85					90						

<210> 3023

<211> 1834

<212> DNA

<213> Homo sapiens

<400> 3023

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 120
 tcagattttt ccctccagtt ggtttaattt ctatttcccta aaacattaaa ataataatgg
 180
 aatgattgaa ataataaaca tttttcttat tcaagatttc gtcatggcta ttgtaaagga
 240
 aaccctagga aaatggtgaa aacttgggca gaaaaagaaa tgaggaactt aatcaggcta
 300

aacacagcag agataccatg tccagaacca ataatgctaa gaagtcattg tcttgcacg
 360
 agtttcatcg gtaaagatga catgcctgca cactcttga aaaatgtcca gttatcagaa
 420
 tccaaggctc gggagttgta cctgcaggtc attcagtaca tgagaagaat gtatcaggat
 480
 gccagacttg tccatgcaga tctcagttaa ttaacatgc tgtaaccagg tggaggcgtg
 540
 tatatcattg acgtgtctca gtccgtggag cagcaccacc cacatgcctt ggagttcttg
 600
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 660
 gtgcgggagc tctttgaatt tgtcacagat ccatccatta cacatgagaa catggatgct
 720
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 780
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 840
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 1080
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 1140
 aaggaagccc agagagagaa aagaaaaaac aaaattccta aacatgtgaa aaaaagaaa
 1200
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 1260
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 1320
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 1380
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 1440
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 1500
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 1560
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 1620
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 1680
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 1740
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 1834

<211> 347
 <212> PRT
 <213> Homo sapiens

<400> 3024

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Gly Asn Pro Arg Lys Met Val Lys Thr Trp Ala Glu Lys Glu Met Arg
 20          25          30
Asn Leu Ile Arg Leu Asn Thr Ala Glu Ile Pro Cys Pro Glu Pro Ile
 35          40          45
Met Leu Arg Ser His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp
 50          55          60
Met Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys Ala
 65          70          75          80
Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr Gln
 85          90          95
Asp Ala Arg Leu Val His Ala Asp Leu Ser Glu Phe Asn Met Leu Tyr
100          105          110
His Gly Gly Gly Val Tyr Ile Ile Asp Val Ser Gln Ser Val Glu His
115          120          125
Asp His Pro His Ala Leu Glu Phe Leu Arg Lys Asp Cys Ala Asn Val
130          135          140
Asn Asp Phe Phe Met Arg His Ser Val Ala Val Met Thr Val Arg Glu
145          150          155          160
Leu Phe Glu Phe Val Thr Asp Pro Ser Ile Thr His Glu Asn Met Asp
165          170          175
Ala Tyr Leu Ser Lys Ala Met Glu Ile Ala Ser Gln Arg Thr Lys Glu
180          185          190
Glu Arg Ser Ser Gln Asp His Val Asp Glu Glu Val Phe Lys Arg Ala
195          200          205
Tyr Ile Pro Arg Thr Leu Asn Glu Val Lys Asn Tyr Glu Arg Asp Met
210          215          220
Asp Ile Ile Met Lys Leu Lys Glu Glu Asp Met Ala Met Asn Ala Gln
225          230          235          240
Gln Asp Asn Ile Leu Pro Asp Cys Tyr Arg Ile Glu Glu Arg Phe Val
245          250          255
Arg Ser Ser Glu Gly Pro Cys Thr Leu Glu Asn Gln Val Glu Glu Arg
260          265          270
Thr Cys Ser Asp Ser Glu Asp Ile Gly Ser Ser Glu Cys Ser Asp Thr
275          280          285
Asp Ser Glu Glu Gln Gly Asp His Ala Arg Pro Lys Lys His Thr Thr
290          295          300
Asp Pro Asp Ile Asp Lys Lys Glu Arg Lys Lys Met Val Lys Glu Ala
305          310          315          320
Gln Arg Glu Lys Arg Lys Asn Lys Ile Pro Lys His Val Lys Lys Arg
325          330          335
Lys Glu Lys Thr Ala Lys Thr Lys Lys Gly Lys
340          345

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<210> 3025
 <211> 1370
 <212> DNA
 <213> Homo sapiens

<400> 3025
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 120
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 180
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 240
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 300
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 360
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 420
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 480
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 540
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 720
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 780
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 840
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 1140
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 1200
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 1260
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 1370

<210> 3026

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3026

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Pro Ile Arg Arg Gln Ser Leu Thr Pro Pro Pro Gln Asn Thr Ile Thr
      20             25             30
Trp Glu Glu Tyr Ile Ser Ala Glu Asn Gly Lys Ala Pro His Leu Gly
      35             40             45
Arg Glu Leu Val Cys Lys Glu Ser Lys Lys Thr Phe Lys Ala Thr Ile
 50             55             60
Ala Met Ser Gln Glu Phe Pro Leu Gly Ile Glu Leu Leu Leu Asn Val
65             70             75             80
Leu Glu Val Val Ala Pro Phe Lys His Phe Asn Lys Leu Arg Glu Phe
      85             90             95
Val Gln Met Lys Leu Pro Pro Gly Phe Pro Val Lys Leu Asp Ile Pro
      100            105            110
Val Phe Pro Thr Ile Thr Ala Thr Val Thr Phe Gln Glu Phe Arg Tyr
      115            120            125
Asp Glu Phe Asp Gly Ser Ile Phe Thr Ile Pro Asp Asp Tyr Lys Glu
      130            135            140
Asp Pro Ser Arg Phe Pro Asp Leu
145             150

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<210> 3027

<211> 1154

<212> DNA

<213> Homo sapiens

<400> 3027

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120
cgcagacggcg ggcctccgcg gcgctctcca gtcattggact accggcggct tctcatgagc
180
cgggtgggtcc cggggcaatt cgacgacgcg gactcctctg acagtgaata cagagacttg
240
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360
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480
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660
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720
aaagaagcta atgtatacca tgctagcaca gcaaatggag agagcagagc aatcaaaatt
780

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 900
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 960
 ctaagaagtc atgttcttgt catgagtttc atcggtaaag atgacatttc ttttcattca
 1020
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 1140
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 1154

<210> 3028

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3028

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Asp	Asp	Ala	Asp	Ser	Ser	Asp	Ser	Glu	Asn	Arg	Asp	Leu	Lys	Thr	Val
			20					25					30		
Lys	Glu	Lys	Asp	Asp	Ile	Leu	Phe	Glu	Asp	Leu	Gln	Asp	Asn	Val	Asn
		35					40					45			
Glu	Asn	Gly	Glu	Gly	Glu	Ile	Glu	Asp	Glu	Glu	Glu	Gly	Tyr	Asp	
	50					55				60					
Asp	Asp	Asp	Asp	Asp	Trp	Asp	Trp	Asp	Glu	Gly	Val	Gly	Lys	Leu	Ala
				70					75					80	
Lys	Gly	Tyr	Val	Trp	Asn	Gly	Gly	Ser	Asn	Pro	Gln	Ala	Asn	Arg	Gln
			85						90					95	
Thr	Ser	Asp	Ser	Ser	Ala	Lys	Met	Ser	Thr	Pro	Ala	Asp	Lys	Val	
			100				105						110		
Leu	Arg	Lys	Phe	Glu	Asn	Lys	Ile	Asn	Leu	Asp	Lys	Leu	Asn	Val	Thr
		115				120						125			
Asp	Ser	Val	Ile	Asn	Lys	Val	Thr	Glu	Lys	Ser	Arg	Gln	Lys	Glu	Ala
		130			135					140					
Asp	Met	Tyr	Arg	Ile	Lys	Asp	Lys	Ala	Asp	Arg	Ala	Thr	Val	Glu	Gln
				150					155					160	
Val	Leu	Asp	Pro	Arg	Thr	Arg	Met	Ile	Leu	Phe	Lys	Met	Leu	Thr	Arg
			165				170							175	
Gly	Ile	Ile	Thr	Glu	Ile	Asn	Gly	Cys	Ile	Ser	Thr	Gly	Lys	Glu	Ala
		180				185							190		
Asn	Val	Tyr	His	Ala	Ser	Thr	Ala	Asn	Gly	Glu	Ser	Arg	Ala	Ile	Lys
		195				200						205			
Ile	Tyr	Lys	Thr	Ser	Ile	Leu	Val	Phe	Lys	Asp	Arg	Asp	Lys	Tyr	Val
	210				215						220				
Ser	Gly	Glu	Phe	Arg	Phe	Arg	His	Gly	Tyr	Cys	Lys	Gly	Asn	Pro	Arg
			230						235					240	
Lys	Met	Val	Lys	Thr	Trp	Ala	Glu	Lys	Glu	Met	Arg	Asn	Leu	Ile	Arg
			245					250						255	
Leu	Asn	Thr	Ala	Glu	Ile	Pro	Cys	Pro	Glu	Pro	Ile	Met	Leu	Arg	Ser

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                260                265                270
His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp Ile Ser Phe His
      275                280                285
Ser Arg Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys
      290                295                300
Ala Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr
      305                310                315                320
Gln Asp Ala Arg Leu Val His Ala Asp Arg Arg
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<210> 3029

<211> 344

<212> DNA

<213> Homo sapiens

<400> 3029

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120
acatttcccg aggaactaga tatgagtact tttattgatg ttgaagatga aaaatctcct
180
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<210> 3030

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3030

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      20      25      30
Arg Ile Lys Leu Asn Asp Arg Met Thr Phe Pro Glu Glu Leu Asp Met
      35      40      45
Ser Thr Phe Ile Asp Val Glu Asp Glu Lys Ser Pro Gln Thr Glu Ser
      50      55      60
Cys Thr Asp Arg Gly Ala Glu Asn Glu Gly Ser Cys His Ser Asp Gln
      65      70      75      80
Met Ser Asn Asp Phe Ser Asn Asp Asp Gly Val Asp Glu Gly Ile Cys
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Phe Glu Thr Asn Ser Gly Thr Glu Lys Ile Ser Lys Ser Gly Pro Glu
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Lys Asn

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<210> 3031

<211> 567

<212> DNA

<213> Homo sapiens

<400> 3031

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<210> 3032

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3032

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Val	Pro	Pro	Val	Pro	Pro	Pro	Ser	Tyr	Phe	Ala	Thr	Phe	Tyr	Ser	Cys
			20					25					30		
Thr	Pro	Arg	Met	Asn	Arg	Arg	Leu	Val	Gly	Pro	Asp	Val	Ile	Pro	Leu
		35					40				45				
Pro	His	Ile	Tyr	Gly	Ala	Arg	Ile	Lys	Gly	Val	Glu	Val	Phe	Cys	Pro
		50				55					60				
Leu	Asp	Pro	Pro	Pro	Pro	Tyr	Glu	Ala	Val	Val	Ser	Gln	Met	Asp	Gln
					70				75					80	
Glu	Gln	Gly	Ser	Ser	Phe	Gln	Met	Ser	Glu	Gly	Ser	Glu	Ala	Ala	Val
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Ile	Pro	Leu	Asp	Leu	Gly	Cys	Thr	Gln	Val	Thr	Gln	Asp	Gly	Asp	Ile
			100					105						110	
Pro	Asn	Ile	Pro	Ala	Glu	Glu	Asn	Ala	Ser	Thr	Ser	Thr	Pro	Ser	Ser
		115					120					125			
Thr	Leu	Val	Arg	Pro	Ile	Arg	Ser	Arg	Arg	Ala	Leu	Pro	Pro	Leu	Arg
		130				135					140				
Thr	Arg	Ser	Lys	Ser	Asp	Pro	Val	Leu	His	Pro	Ser	Glu	Glu	Arg	Ala
			145		150				155					160	
Ala	Pro	Val	Leu	Ser	Cys	Glu	Ala	Ala	Thr	Gln	Thr	Glu	Arg	Arg	Leu
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185

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 <213> Homo sapiens

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 720
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 821

<210> 3034
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 3034
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 35 40 45
 Tyr Cys Ile Ala Asp Leu Ser Lys Tyr Lys Glu Asn Lys Phe Gly Phe
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 Cys Gly Asn Lys Tyr Cys Asp Lys Lys Glu Gly Leu Lys Ser Trp Glu

<210> 3036
 <211> 65
 <212> PRT
 <213> Homo sapiens

<400> 3036
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 35 40 45
 Val Ile Leu Phe Leu Glu Gly Asn Arg Asp Pro Gly Gly Arg Gly Trp
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<210> 3037
 <211> 3538
 <212> DNA
 <213> Homo sapiens

<400> 3037
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<211> 697

<212> PRT

<213> Homo sapiens

<400> 3038

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Cys	Met	Asn	Met	Asn	Thr	Lys	Ala	Asn	Arg	Lys	Lys	Leu	Val	Arg	Ala
				20				25					30		
Leu	Phe	Ile	Val	Pro	Arg	Gln	Arg	Leu	Asp	Leu	Leu	Pro	Phe	Tyr	Ala
				35			40					45			
Arg	Leu	Val	Ala	Thr	Leu	His	Pro	Cys	Met	Ser	Asp	Val	Ala	Glu	Asp
				50		55				60					
Leu	Cys	Ser	Met	Leu	Arg	Gly	Asp	Phe	Arg	Phe	His	Val	Arg	Lys	Lys
				65		70			75					80	
Asp	Gln	Ile	Asn	Ile	Glu	Thr	Lys	Asn	Lys	Thr	Val	Arg	Phe	Ile	Gly
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Glu	Leu	Thr	Lys	Phe	Lys	Met	Phe	Thr	Lys	Asn	Asp	Thr	Leu	His	Cys

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      565              570              575
Lys Gly Pro Pro Leu Gly Gly Gly Glu Gly Glu Ala Glu Ser Ala Asp
      580              585              590
Thr Met Pro Phe Val Met Leu Thr Arg Lys Gly Asn Lys Gln Gln Phe
      595              600              605
Lys Ile Leu Asn Val Pro Met Ser Ser Gln Leu Ala Ala Asn His Trp
      610              615              620
Asn Gln Gln Gln Ala Glu Gln Glu Glu Arg Met Arg Met Lys Lys Leu
      625              630              635              640
Thr Leu Asp Ile Asn Glu Arg Gln Glu Gln Glu Asp Tyr Gln Glu Met
      645              650              655
Leu Gln Ser Leu Ala Gln Arg Pro Ala Pro Ala Asn Thr Asn Arg Glu
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<210> 3039

<211> 1836

<212> DNA

<213> Homo sapiens

<400> 3039

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<211> 142

<212> PRT

<213> Homo sapiens

<400> 3040

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				20					25					30	
Ala	Arg	Ala	Phe	Glu	Asp	Gln	Arg	Val	Ala	Ser	Phe	Cys	Thr	Leu	Thr
				35				40				45			
Asp	Met	Gln	His	Gly	Gln	Asp	Leu	Glu	Gly	Ala	Gln	Glu	Leu	Pro	Leu
				50				55				60			
Cys	Val	Asp	Pro	Gly	Ser	Gly	Lys	Glu	Phe	Met	Asp	Thr	Thr	Gly	Glu
				65			70			75				80	
Arg	Ser	Pro	Ser	Pro	Leu	Thr	Gly	Lys	Val	Asn	Gln	Leu	Glu	Leu	Ile

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<212> DNA
<213> Homo sapiens

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<210> 3042

<211> 360

<212> PRT

<213> Homo sapiens

<400> 3042

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		20						25					30		
Ile	Leu	Leu	His	Gln	Val	Glu	Ala	Leu	Ala	Ala	Gly	Val	Asp	His	
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Val	Ile	Leu	Ala	Val	Ser	Tyr	Met	Ser	Gln	Val	Leu	Glu	Lys	Glu	Met
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Lys	Ala	Gln	Glu	Gln	Arg	Leu	Gly	Ile	Arg	Ile	Ser	Met	Ser	His	Glu
65				70					75					80	
Glu	Glu	Pro	Leu	Gly	Thr	Ala	Gly	Pro	Leu	Ala	Leu	Ala	Arg	Asp	Leu
		85						90					95		
Leu	Ser	Glu	Thr	Ala	Asp	Pro	Phe	Phe	Val	Leu	Asn	Ser	Asp	Val	Ile
	100						105						110		
Cys	Asp	Phe	Pro	Phe	Gln	Ala	Met	Val	Gln	Phe	His	Arg	His	His	Gly
	115						120				125				
Gln	Glu	Gly	Ser	Ile	Leu	Val	Thr	Lys	Val	Glu	Glu	Pro	Ser	Lys	Tyr
	130				135					140					
Gly	Val	Val	Val	Cys	Glu	Ala	Asp	Thr	Gly	Arg	Ile	His	Arg	Phe	Val
145				150					155					160	
Glu	Lys	Pro	Gln	Val	Phe	Val	Ser	Asn	Lys	Ile	Asn	Ala	Gly	Met	Tyr
		165						170					175		
Ile	Leu	Ser	Pro	Ala	Val	Leu	Arg	Arg	Ile	Gln	Leu	Gln	Pro	Thr	Ser
	180						185						190		
Ile	Glu	Lys	Glu	Val	Phe	Pro	Ile	Met	Ala	Lys	Glu	Gly	Gln	Leu	Tyr
	195						200				205				
Ala	Met	Glu	Leu	Gln	Gly	Phe	Trp	Met	Asp	Ile	Gly	Gln	Pro	Lys	Asp
	210				215					220					
Phe	Leu	Thr	Gly	Met	Cys	Leu	Phe	Leu	Gln	Ser	Leu	Arg	Gln	Lys	Gln
225				230					235					240	
Pro	Glu	Arg	Leu	Cys	Ser	Gly	Pro	Gly	Ile	Val	Gly	Asn	Val	Leu	Val
		245						250					255		
Asp	Pro	Ser	Ala	Arg	Ile	Gly	Gln	Asn	Cys	Ser	Ile	Gly	Pro	Asn	Val
	260					265					270				
Ser	Leu	Gly	Pro	Gly	Val	Val	Val	Glu	Asp	Gly	Val	Cys	Ile	Arg	Arg

```

      275              280              285
Cys Thr Val Leu Arg Asp Ala Arg Ile Arg Ser His Ser Trp Leu Glu
  290              295              300
Ser Cys Ile Val Gly Trp Arg Cys Arg Val Gly Gln Trp Val Arg Met
  305              310              315              320
Glu Asn Val Thr Val Leu Gly Glu Asp Val Ile Val Asn Asp Glu Leu
      325              330              335
Tyr Leu Asn Gly Ala Ser Val Leu Pro His Lys Ser Ile Gly Glu Ser
      340              345              350
Val Pro Glu Pro Arg Ile Ile Met
      355              360

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<210> 3043

<211> 394

<212> DNA

<213> Homo sapiens

<400> 3043

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120
cttctctgac ctcaactcaa ctcacgtgtc tttagacactt taaggggactt cctgttttag
180
ggctctcttg ctgggtgtca ttgaatgggc agtgattctc taactttaga ctgatgttcc
240
ccagcctttg ttgggggact cggaggcaga gtagacagtt acccttaccce ctgggttggg
300
gagggtcata ttcctggtat cccagcaggg tcaacagggg cttcattttt ctgaggggact
360
agagggtcct gtggagctcc tgggacagag atct
394

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<210> 3044

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3044

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Met Lys Pro Leu Leu Thr Ser Trp Gly Tyr Gln Glu Tyr Asp Pro Pro
  1              5              10              15
Gln Pro Arg Gly Lys Gly Asn Cys Leu Leu Cys Leu Arg Val Pro Lys
      20              25              30
Gln Arg Leu Gly Asn Ile Ser Leu Lys Leu Glu Asn His Cys Pro Phe
      35              40              45
Asn Asp Thr Gln Pro Glu Asp Pro Lys Thr Gly Ser Pro Leu Lys Cys
      50              55              60
Gln Arg His Val Ser Trp Ser Glu Val Arg Glu Ala Asp Ser Gly Leu
      65              70              75              80
Leu Leu Gly Gln Thr Pro Val Lys Arg Lys Arg Trp His His Glu Thr
      85              90              95
Ser Ser Phe Ser Pro Cys Leu Trp Leu Lys Ala Arg Ala Ser Arg Ser
      100              105              110
Lys Glu Ile

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115

<210> 3045

<211> 605

<212> DNA

<213> Homo sapiens

<400> 3045

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60
gaagaaattc tttgttcaa gctgctatcc atgtccaggg ccaaacatga atcctattgc
120
tcttgggagc cgctggcttg cttatgcaga aaacaagttg attcgaatgc atcagtcacc
180
tggtggagcc tgtggagaca acattcagtc ttatactgcc acagtcatta gtgctgctaa
240
aacattgaaa agtggcctga caatggtagg gaaagtgggt actcagctga caggcacact
300
gccttcagggt gtgacagaag atgatgttg catccacagt aattcacggc ggagtccttt
360
gggtcccaggc atcatcacag ttattgacac cgaaaccgtg gagagggcca ggtgtttgtg
420
agtgaggatc ttgacagtga tggcattgtg gcccaattcc ctgcccata gaagccagtg
480
tgctgcattg cttttaatac aagtggaatg cttctagtca caacagacac ccttggccat
540
gactttcatg tcttccaaat tctgactcat ccttggctct catctacgga gagacgacaa
600
cgcggt
605

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<210> 3046

<211> 72

<212> PRT

<213> Homo sapiens

<400> 3046

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His Arg Asn Arg Gly Glu Gly Gln Val Phe Val Ser Glu Asp Leu Asp
1      5      10      15
Ser Asp Gly Ile Val Ala His Phe Pro Ala His Glu Lys Pro Val Cys
20     25     30
Cys Met Ala Phe Asn Thr Ser Gly Met Leu Leu Val Thr Thr Asp Thr
35     40     45
Leu Gly His Asp Phe His Val Phe Gln Ile Leu Thr His Pro Trp Ser
50     55     60
Ser Ser Thr Glu Arg Arg Gln Arg
65      70

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<210> 3047

<211> 391

<212> DNA

<213> Homo sapiens

<400> 3047

attttggagg agaggaagaa tgaaatgacc caagtcatta cccgaaccca agaggagaaa
 60
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 120
 ttgggttgagt caggaattca gtttatggat gagccagaaa tggcagtggt tctgcagaat
 180
 gccaaaaccc tgctaaaaaa aatctcggaa gcatacaagg catttcagat ggagaaaata
 240
 gaacatggct atgagaacat gaaccacttc acagtcaacc tcaatagaga agaaaagata
 300
 atacgtgaaa ttgactttta cagagaagat gaagatgaag aagaagaaga aggcggagaa
 360
 ggagaaaaag aagagaagga gaagtgggag a
 391

<210> 3048

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3048

Met	Thr	Gln	Val	Ile	Thr	Arg	Thr	Gln	Glu	Glu	Lys	Leu	Glu	His	Val
1				5				10						15	
Arg	Ala	Leu	Ile	Lys	Lys	Tyr	Ser	Asp	His	Leu	Glu	Asn	Val	Ser	Lys
			20				25						30		
Leu	Val	Glu	Ser	Gly	Ile	Gln	Phe	Met	Asp	Glu	Pro	Glu	Met	Ala	Val
			35				40					45			
Phe	Leu	Gln	Asn	Ala	Lys	Thr	Leu	Leu	Lys	Lys	Ile	Ser	Glu	Ala	Ser
	50					55					60				
Lys	Ala	Phe	Gln	Met	Glu	Lys	Ile	Glu	His	Gly	Tyr	Glu	Asn	Met	Asn
	65				70					75				80	
His	Phe	Thr	Val	Asn	Leu	Asn	Arg	Glu	Glu	Lys	Ile	Ile	Arg	Glu	Ile
			85					90					95		
Asp	Phe	Tyr	Arg	Glu	Asp	Glu	Asp	Glu	Glu	Glu	Glu	Gly	Gly	Glu	
			100				105						110		
Gly	Glu	Lys	Glu	Glu	Lys	Glu	Lys	Trp	Glu						
			115				120								

<210> 3049

<211> 599

<212> DNA

<213> Homo sapiens

<400> 3049

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 120
 tttctctctc tgaacgaaag ctcggccgag gtgctcgaat acaccattaa ggaagaaaaag
 180
 tcgatattgt acctggaagg ctcggctctt gtgtttgagg acatcttcag attgattgag
 240
 ttctactgtg tcagtagaga cttactgccc ttcacactgc ggctacccca ggccatcctt
 300

gaggccagca gcttcacgga ccttgagacc atcgccaacc tgggtctggg ttctctgggac
 360
 tcctcgctga atcctccaca agaaagaggg aagccagcag agcccccaag agaccggggc
 420
 cccggattcc ccctagtctc cagcctcagg cccacagccc atgacgcaaa ctgtgctgt
 480
 gaaatcgagc tgtcggtagg aaatgaccgc ctgtgggttg tgaatcctat ttctatcgag
 540
 gactgcagca gcgccctgcc caccgaccag ccacctcttg gaaattgccc ttcacgcgt
 599

<210> 3050

<211> 177

<212> PRT

<213> Homo sapiens

<400> 3050

Met Phe Leu Val Arg Arg Asp Ser Ser Ser Lys Gln Leu Val Leu Cys
 1 5 10 15
 Val His Phe Pro Ser Leu Asn Glu Ser Ser Ala Glu Val Leu Glu Tyr
 20 25 30
 Thr Ile Lys Glu Glu Lys Ser Ile Leu Tyr Leu Glu Gly Ser Ala Leu
 35 40 45
 Val Phe Glu Asp Ile Phe Arg Leu Ile Ala Phe Tyr Cys Val Ser Arg
 50 55 60
 Asp Leu Leu Pro Phe Thr Leu Arg Leu Pro Gln Ala Ile Leu Glu Ala
 65 70 75 80
 Ser Ser Phe Thr Asp Leu Glu Thr Ile Ala Asn Leu Gly Leu Gly Phe
 85 90 95
 Trp Asp Ser Ser Leu Asn Pro Pro Gln Glu Arg Gly Lys Pro Ala Glu
 100 105 110
 Pro Pro Arg Asp Arg Ala Pro Gly Phe Pro Leu Val Ser Ser Leu Arg
 115 120 125
 Pro Thr Ala His Asp Ala Asn Cys Ala Cys Glu Ile Glu Leu Ser Val
 130 135 140
 Gly Asn Asp Arg Leu Trp Phe Val Asn Pro Ile Phe Ile Glu Asp Cys
 145 150 155 160
 Ser Ser Ala Leu Pro Thr Asp Gln Pro Pro Leu Gly Asn Cys Pro Ser
 165 170 175

Arg

<210> 3051

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3051

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 120
 tgaagactct caggttacca gcacaatatc cccctacat tctctcaca agggactccc
 180

tcctcggcca ccgtcgaca acaggcctcc tcctccccag tccctggagg gactccgaca
 240
 gatgcactat caccgncaac gactatgaca agtcacccat caagcccaaa atgtggagtg
 300
 agtcctcttt agatgaaccc tatgagaagg tcaagaagcg ctctctctcac agccattcca
 360
 gcagccacaa gcgcttcccc agcacaggaa gctgtgcgga agccggcgga ggaagcaact
 420
 ccttgacaaa cagccccatc cggggcctcc cgactggaa ctccacagtcc agcatgccgt
 480
 ccacgccaga cctgcgggtc cggagtcctcc actacgtcca ttccacgagg tcggtggaca
 540
 tcagcccccac ccgactgcac agcctcgcac tgcacttttag gcaccggagc tccagcctgg
 600
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 660
 cgcggactcg tagcagcaac ggctcagacc ccatggacga ctgctcgtcg tgcaccagcc
 720
 actcgagctc ggagcactac taccggcgcg agatgaacgc caactactcc acgctggccc
 780
 aggactcgcc gtccaaggcg cggtcgcagt gatattcgac
 820

<210> 3052

<211> 62

<212> PRT

<213> Homo sapiens

<400> 3052

Arg	Leu	Ser	Gly	Tyr	Gln	His	Asn	Ile	Pro	Pro	Thr	Phe	Ser	Ser	Gln
1				5					10					15	
Gly	Thr	Pro	Ser	Ser	Ala	Thr	Val	Ala	Gln	Gln	Ala	Ser	Ser	Ser	Pro
			20					25					30		
Val	Pro	Gly	Gly	Thr	Pro	Thr	Asp	Ala	Leu	Ser	Pro	Xaa	Thr	Thr	Met
		35					40					45			
Thr	Ser	His	Pro	Ser	Ser	Pro	Lys	Cys	Gly	Val	Ser	Pro	Leu		
	50					55					60				

<210> 3053

<211> 2625

<212> DNA

<213> Homo sapiens

<400> 3053

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 120
 cagtttaaaa gatttagaga aactgtacca acttgggata caataagaga tgaagaagat
 180
 gttcttgatg agctcttgca gtatttgggt gttactagtc ctgaatgctt acagagaact
 240
 ggaatctcac ttaatatctc tgctccacaa cctgtgtgca tttctgaaaa acaagaaaat
 300

gatgttatta atgctatcct taagcaacat acagaagaaa aagaatttgt tgagaagcac
360
tttaatgact taaacatgaa agctgtggaa caagatgaac caatacctca aaaacctcag
420
tcagcatttt attattgcag attgcttctt agtatattgg gaatgaattc ctgggacaaa
480
cggaggagct ttcattctct gaagaaaaat gaaaagctac ttagagaact taggaacttg
540
gattcaaggc agtgccgaga gacacacaag attgcagtat tttatgttgc tgaaggacaa
600
gaagacaaaac actccattct caccaatata ggaggaagtc aagcatatga agattttgta
660
gctggtcttg gttgggaggt aaatcttaca aaccattgtg gttttatggg aggactacaa
720
aaaaacaaaa gcaactggatt gaccactcca tattttgcta cctctacagt agaggtaata
780
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840
catttgggaa atgatgaagt gcacattgtt tggtcagagc atactagaga ctacaggaga
900
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960
atgttcagta ttcagataat gaaaaaacca gaggttcctt cttttgttcc cttttttgat
1020
ggtgctattg tgaatggaaa ggttctaccc attatggtta gagcaacagc tataaatgca
1080
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1140
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1200
cagggttttt ctccagctcc ctaccaccat ttaccatctg atgccgatca ttaaatatca
1260
gttctgttta tctgaaggct cctaccacga gattctaccc agtgaaactc ccacagcaac
1320
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1380
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1440
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1560
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1620
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1680
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1740
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1800
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1860
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1920

aaacactcaa aataaatggg ctttagcatc tcaaattcca actgaaatca ttttagtatt
 1980
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 2040
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 2100
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 2160
 ttattattgg ctgctagatc ctgggtgttc tatgttcttt ttttaagcacc aaaaagaaga
 2220
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 2280
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 2340
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 2520
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 2580
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 2625

<210> 3054

<211> 417

<212> PRT

<213> Homo sapiens

<400> 3054

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 20 25 30
 Thr Val Lys Asp Gly Leu Ser Leu Gln Phe Lys Arg Phe Arg Glu Thr
 35 40 45
 Val Pro Thr Trp Asp Thr Ile Arg Asp Glu Glu Asp Val Leu Asp Glu
 50 55 60
 Leu Leu Gln Tyr Leu Gly Val Thr Ser Pro Glu Cys Leu Gln Arg Thr
 65 70 75 80
 Gly Ile Ser Leu Asn Ile Pro Ala Pro Gln Pro Val Cys Ile Ser Glu
 85 90 95
 Lys Gln Glu Asn Asp Val Ile Asn Ala Ile Leu Lys Gln His Thr Glu
 100 105 110
 Glu Lys Glu Phe Val Glu Lys His Phe Asn Asp Leu Asn Met Lys Ala
 115 120 125
 Val Glu Gln Asp Glu Pro Ile Pro Gln Lys Pro Gln Ser Ala Phe Tyr
 130 135 140
 Tyr Cys Arg Leu Leu Leu Ser Ile Leu Gly Met Asn Ser Trp Asp Lys
 145 150 155 160
 Arg Arg Ser Phe His Leu Leu Lys Lys Asn Glu Lys Leu Leu Arg Glu
 165 170 175
 Leu Arg Asn Leu Asp Ser Arg Gln Cys Arg Glu Thr His Lys Ile Ala

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      180              185              190
Val Phe Tyr Val Ala Glu Gly Gln Glu Asp Lys His Ser Ile Leu Thr
      195              200              205
Asn Thr Gly Gly Ser Gln Ala Tyr Glu Asp Phe Val Ala Gly Leu Gly
      210              215              220
Trp Glu Val Asn Leu Thr Asn His Cys Gly Phe Met Gly Gly Leu Gln
      225              230              235              240
Lys Asn Lys Ser Thr Gly Leu Thr Thr Pro Tyr Phe Ala Thr Ser Thr
      245              250              255
Val Glu Val Ile Phe His Val Ser Thr Arg Met Pro Ser Asp Ser Asp
      260              265              270
Asp Ser Leu Thr Lys Lys Leu Arg His Leu Gly Asn Asp Glu Val His
      275              280              285
Ile Val Trp Ser Glu His Thr Arg Asp Tyr Arg Arg Gly Ile Ile Pro
      290              295              300
Thr Glu Phe Gly Asp Val Leu Ile Val Ile Tyr Pro Met Lys Asn His
      305              310              315              320
Met Phe Ser Ile Gln Ile Met Lys Lys Pro Glu Val Pro Phe Phe Gly
      325              330              335
Pro Leu Phe Asp Gly Ala Ile Val Asn Gly Lys Val Leu Pro Ile Met
      340              345              350
Val Arg Ala Thr Ala Ile Asn Ala Ser Arg Ala Leu Lys Ser Leu Ile
      355              360              365
Pro Leu Tyr Gln Asn Phe Tyr Glu Glu Arg Ala Arg Tyr Leu Gln Thr
      370              375              380
Ile Val Gln His His Leu Glu Pro Thr Thr Phe Glu Asp Phe Ala Ala
      385              390              395              400
Gln Val Phe Ser Pro Ala Pro Tyr His His Leu Pro Ser Asp Ala Asp
      405              410              415
His

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<210> 3055

<211> 905

<212> DNA

<213> Homo sapiens

<400> 3055

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120
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180
ttatgagctg ttaaactaca gtgagcatgg gacaacgggtg gacaatgtgc tgtattcatg
240
tgactttctg gagaagaccc cgccaacccc cccaagcagt attgttgcca aagtgcagag
300
tgtcatcagg cgccgccggc accagaaaca ggacgaagag ccaagtgagg aggcagccat
360
gatgagttcc caggcccagg ggccgcagcg gagacctgc aattgcaaa ctagcagctc
420
gagcttgatt gggggcagtg gggccggctg ggagggcaca gccttactgc accatggcag
480

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ctacatcaag ctgggctgcc tgcagtttgt cttcagcadc actgagtttg cgaccaaaaca
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 600
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 660
 ccactggcct gtacaccac ccaagactcc tgcaatgcaa aaatgtacac aaaccaagcc
 720
 cgggtgtttt ctatactcta ccagaaaccc ttcaactaca atctttgcat gaaatgaaga
 780
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 840
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 900
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 905

<210> 3056

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3056

Met	Ser	Tyr	Arg	Thr	Leu	Tyr	Ile	Gly	Thr	Gly	Ala	Asp	Met	Asp	Val
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Cys	Leu	Thr	Asn	Tyr	Gly	His	Cys	Asn	Tyr	Val	Ser	Gly	Lys	His	Ala
		20					25						30		
Cys	Ile	Phe	Tyr	Asp	Glu	Asn	Thr	Lys	His	Tyr	Glu	Leu	Leu	Asn	Tyr
		35				40						45			
Ser	Glu	His	Gly	Thr	Thr	Val	Asp	Asn	Val	Leu	Tyr	Ser	Cys	Asp	Phe
	50				55					60					
Ser	Glu	Lys	Thr	Pro	Pro	Thr	Pro	Pro	Ser	Ser	Ile	Val	Ala	Lys	Val
65				70					75					80	
Gln	Ser	Val	Ile	Arg	Arg	Arg	His	Gln	Lys	Gln	Asp	Glu	Glu	Pro	
			85				90							95	
Ser	Glu	Glu	Ala	Ala	Met	Met	Ser	Ser	Gln	Ala	Gln	Gly	Pro	Gln	Arg
		100					105					110			
Arg	Pro	Cys	Asn	Cys	Lys	Ala	Ser	Ser	Ser	Ser	Leu	Ile	Gly	Gly	Ser
	115					120						125			
Gly	Ala	Gly	Trp	Glu	Gly	Thr	Ala	Leu	Leu	His	His	Gly	Ser	Tyr	Ile
	130				135					140					
Lys	Leu	Gly	Cys	Leu	Gln	Phe	Val	Phe	Ser	Ile	Thr	Glu	Phe	Ala	Thr
145			150					155						160	
Lys	Gln	Pro	Lys	Gly	Asp	Ala	Ser	Leu	Leu	Gln	Asp	Gly	Val	Leu	Ala
			165					170						175	
Glu	Lys	Leu	Ser	Leu	Lys	Pro	His	Gln	Gly	Pro	Val	Leu	Arg	Ser	Asn
		180						185					190		
Ser	Val	Pro													
		195													

<210> 3057

<211> 2169

<212> DNA

<213> Homo sapiens

<400> 3057
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120
gtgacatcct tcgagggcaa acacggtagt gtccgctact gtatcaaggc caccctgcac
180
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240
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<210> 3058

<211> 298

<212> PRT

<213> Homo sapiens

<400> 3058

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 35 40 45
 Asn Thr Pro Ala Leu Leu Ala Pro Gln Ala Gly Ala Arg Glu Lys Val
 50 55 60
 Ala Arg Ser Trp Tyr Cys Asn Arg Gly Leu Val Ser Leu Ser Ala Lys
 65 70 75 80
 Ile Asp Arg Lys Gly Tyr Thr Pro Gly Glu Val Ile Pro Val Phe Ala
 85 90 95
 Glu Ile Asp Asn Gly Ser Thr Arg Pro Val Leu Pro Arg Ala Ala Val
 100 105 110
 Val Gln Thr Gln Thr Phe Met Ala Arg Gly Ala Arg Lys Gln Lys Arg
 115 120 125
 Ala Val Val Ala Ser Leu Ala Gly Glu Pro Val Gly Pro Gly Gln Arg
 130 135 140
 Ala Leu Trp Gln Gly Arg Ala Leu Arg Ile Pro Pro Val Gly Pro Ser
 145 150 155 160
 Ile Leu His Cys Arg Val Leu His Val Asp Tyr Ala Leu Lys Val Cys
 165 170 175
 Val Asp Ile Pro Gly Thr Ser Lys Leu Leu Glu Leu Pro Leu Val
 180 185 190
 Ile Gly Thr Ile Pro Leu His Pro Phe Gly Ser Arg Ser Ser Ser Val

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Glu Arg Pro Glu Ala Pro Pro Glu Tyr Ser Glu Val Val Ala Asp Thr						
225	230	235	240			
Glu Glu Ala Ala Leu Gly Gln Ser Pro Phe Pro Leu Pro Gln Asp Pro						
	245	250	255			
Asp Met Ser Leu Glu Gly Pro Phe Phe Ala Tyr Ile Gln Glu Phe Arg						
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Tyr Arg Pro Pro Leu Tyr Ser Glu Glu Asp Pro Asn Pro Leu Leu						
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<210> 3059

<211> 1411

<212> DNA

<213> Homo sapiens

<400> 3059

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1020

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<210> 3060

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3060

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			20					25						30	
Arg	Thr	Tyr	Ser	Arg	Lys	Lys	Gly	Gly	Arg	Lys	Ser	Arg	Ser	Lys	Ser
			35				40					45			
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Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Gly	Lys	Ser	Tyr	Arg	Val
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Gln	Arg	Ser	Arg	Ser	Lys	Ser	Arg	Thr	Arg	Arg	Ser	Arg	Ser	Arg	Pro
			100					105						110	
Arg	Leu	Arg	Ser	His	Ser	Arg	Ser	Glu	Arg	Ser	Ser	His	Arg	Arg	
		115				120					125				
Thr	Arg	Ser	Arg	Ser	Arg	Asp	Arg	Glu	Arg	Arg	Lys	Gly	Arg	Asp	Lys
		130				135					140				
Glu	Lys	Arg	Glu	Lys	Glu	Lys	Asp	Lys	Gly	Lys	Asp	Lys	Glu	Leu	His
			145			150				155				160	
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			165					170						175	
Leu	Pro	Pro	Ala	Glu	Gln	Ala	Lys	Ala	Arg	Leu	Gln	Leu	Val	Leu	Glu
			180					185						190	
Ala	Ala	Ala	Lys	Ala	Asp	Glu	Ala	Leu	Lys	Ala	Lys	Glu	Arg	Asn	Glu
			195				200					205			
Glu	Glu	Ala	Lys	Arg	Arg	Lys	Glu	Glu	Asp	Gln	Ala	Thr	Leu	Val	Glu
		210				215					220				
Gln	Val	Lys	Arg	Val	Lys	Glu	Ile	Glu	Ala	Ile	Glu	Ser	Asp	Ser	Phe
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Val	Gln	Gln	Thr	Phe	Arg	Ser	Ser	Lys	Glu	Val	Lys	Lys	Ser	Val	Glu
			245					250						255	
Pro	Ser	Glu	Val	Lys	Gln	Ala	Thr	Ser	Thr	Ser	Gly	Pro	Ala	Ser	Ala

	260		265		270										
Val	Ala	Asp	Pro	Pro	Ser	Thr	Glu	Lys	Glu	Ile	Asp	Pro	Thr	Ser	Ile
	275		280		285										
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	290		295		300										
Leu	Phe	Ile	Glu	Lys	Ala	Asp	Ala	Glu	Glu	Lys	Trp	Phe	Lys	Arg	Leu
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<210> 3061

<211> 1554

<212> DNA

<213> Homo sapiens

<400> 3061

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<210> 3062

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3062

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Phe	Lys	Met	Leu	Gln	Glu	Asn	Arg	Glu	Gly	Arg	Ala	Ala	Pro	Arg	Gln
			20					25					30		
Ser	Ser	Ser	Phe	Arg	Leu	Leu	Gln	Glu	Ala	Leu	Glu	Ala	Glu	Glu	Arg
			35				40					45			
Gly	Gly	Thr	Pro	Ala	Phe	Leu	Pro	Ser	Ser	Leu	Ser	Pro	Gln	Ser	Ser
	50				55						60				
Leu	Pro	Ala	Ser	Arg	Ala	Leu	Ala	Thr	Pro	Pro	Lys	Leu	His	Thr	Cys
	65				70					75				80	
Glu	Lys	Cys	Ser	Thr	Ser	Ile	Ala	Asn	Gln	Ala	Val	Arg	Ile	Gln	Glu
			85						90					95	
Gly	Arg	Tyr	Arg	His	Pro	Gly	Cys	Tyr	Thr	Cys	Ala	Asp	Cys	Gly	Leu
			100				105						110		
Asn	Leu	Lys	Met	Arg	Gly	His	Phe	Trp	Val	Gly	Asp	Glu	Leu	Tyr	Cys
		115				120						125			
Glu	Lys	His	Ala	Arg	Gln	Arg	Tyr	Ser	Ala	Pro	Ala	Thr	Leu	Ser	Ser
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<210> 3063

<211> 386

<212> DNA

<213> Homo sapiens

<400> 3063

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<210> 3064

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3064

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		20						25					30		
Tyr	Gln	Cys	Ser	Arg	Pro	Ala	Pro	Leu	His	Ser	Arg	Asp	Leu	His	Ser
		35					40					45			
Met	Ile	Val	Ala	Ala	Phe	Gln	Cys	Leu	Cys	Val	Trp	Leu	Thr	Glu	His
	50					55				60					
Pro	Asp	Met	Leu	Asp	Glu	Lys	Asp	Tyr	Leu	Lys	Glu	Val	Leu	Glu	Ile
65					70					75				80	
Val	Glu	Leu	Gly	Ile	Ser	Gly	Ser	Lys	Ser	Lys	Asn	Asn	Glu	Gln	Glu
			85					90						95	
Val	Lys	Tyr	Lys	Gly	Asp	Lys	Glu	Pro	Asn	Pro	Ala	Ser	Met	Arg	Val
		100						105					110		
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<210> 3065

<211> 2104

<212> DNA

<213> Homo sapiens

<400> 3065

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2100

tgca
2104

<210> 3066
<211> 183
<212> PRT
<213> Homo sapiens

<400> 3066
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35 40 45
Pro Val Gly Glu Glu Ser Ile Ser Asp Ala Glu Lys Val Ala Met Xaa
50 55 60
Ser Gln Gly Pro Xaa Thr Ala Pro Gly Ser Pro Cys Arg Ser Cys Gly
65 70 75 80
Thr Cys Cys Thr Arg Gly Thr Xaa Leu Lys Ser Lys Val Phe Leu Leu
85 90 95
Gln Glu Glu Leu Ala Tyr Tyr Lys Ser Glu Glu Met Glu Glu Glu Asn
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130 135 140
Lys Arg Leu Ala Asn Thr Gln Arg Asn Val His Ile Gln Glu Ser Phe
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<211> 645
<212> DNA
<213> Homo sapiens

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<210> 3068

<211> 204

<212> PRT

<213> Homo sapiens

<400> 3068

Xaa	Ala	Ala	Gly	Gly	Gly	Asp	Glu	Ser	His	Thr	Gln	Pro	Ser	Gly
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			20				25					30		
Ser	Pro	Asn	Arg	Ala	Gln	Gly	Pro	Ser	Xaa	Val	Leu	Val	His	Gln
		35					40				45			
Arg	Glu	Pro	Thr	Ala	Gly	Ser	Pro	Pro	Cys	Ser	Leu	Pro	Arg	Pro
	50				55				60					
Leu	Gln	Pro	Pro	Ser	Thr	Pro	Pro	Pro	Val	His	Lys	Glu	Gln	Lys
	65				70				75				80	
Lys	Ser	Asp	Pro	Pro	Pro	Pro	Pro	Gly	Lys	Phe	Lys	Ser	Phe	Leu
			85					90					95	
Pro	Pro	Arg	Ser	Pro	Gly	Asn	Ser	Ala	Leu	Gly	Pro	Arg	Arg	Gly
			100					105					110	
Gly	Trp	Ile	Ala	Ala	Gly	Gly	Ala	Pro	Ala	Met	Pro	Arg	Pro	Pro
		115					120				125			
Gly	Ala	Gly	Asp	Arg	Glu	Ile	Pro	Arg	Asp	Leu	Ala	Cys	Ala	Pro
	130					135				140				
Pro	Pro	Pro	Gly	Ala	Gly	Arg	Gly	Ser	Glu	His	Arg	Ser	Ala	Pro
			145			150				155				160
Arg	Arg	Cys	Gly	Ser	Lys	Glu	Pro	Glu	Ala	Ala	Ser	Arg	Pro	Pro
				165				170					175	
Ser	Pro	Ala	Glu	Glu	Glu	Pro	Pro	Pro	Val	Ser	Ala	Glu	Glu	Thr
			180					185					190	
Pro	Ser	Pro	Ala	Pro	Pro	Pro	Arg	Gly	Glu	Trp	Gly			
			195					200						

<210> 3069

<211> 1561

<212> DNA

<213> Homo sapiens

<400> 3069

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 120
 gaaaaggtta tatttgtagg tggatgcaag tatattggag aaatatttct atcaaatca
 180

ctggttttgt taggagtatt ttgatttttc tattttttacg ctgggaaaaa aattaaaaa
240
agtattgtcag tgttcatttt atgggatagt tggcttcact gtgtttgtca tgtttgtccg
300
aattacagct gtttatcttg caactttaag attaattaaa tgcaaatgta actctgtgaa
360
tcattgggaat acctgccaga cctcttatta ataccttcac ttaaaacccc ctgtgcctga
420
gagtcattaa ttgtctaaaa gaaaagtgtc aaagcagccc ttgtcccaca aacaattctg
480
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540
tgaggacaca agaaggctcc gatgataacc tggcaacctt ggtagaacc cagccaagt
600
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660
ccatgtcatc cagtacaaag gataaaaacg gattcaaccg gaaattcaat gtggcaccac
720
atatgggata catgagtgcg gttatacaac aggccacata ttttttttga acagtctcct
780
acatgtgatg ccgaggacat gtgtaacct cataacgtct ctaggaaatct gtattttaatt
840
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1260
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1561

<210> 3070

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3070

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Met His Leu Lys Asp Leu Gly Leu Asn Phe His Val Ser Val Leu Gly
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Glu Thr Phe Thr Asp Val Pro Asp Ile Phe Ser Glu Ala Lys Lys Ala
      20           25           30
Leu Gly Ser Ser Val Leu His Trp Gly Tyr Leu Pro Ser Lys Asp Asp
      35           40           45
Tyr Phe Gln Val Leu Cys Val Ala Asp Val Val Ile Ser Thr Ala Lys
 50           55           60
His Glu Phe Phe Gly Val Ala Met Leu Glu Ala Val Tyr Cys Gly Cys
65           70           75           80
Tyr Pro Leu Cys Pro Lys Asp Leu Val Tyr Pro Glu Ile Phe Pro Ala
      85           90           95
Glu Tyr Leu Tyr Ser Thr Pro Glu Gln Leu Ser Lys Arg Leu Gln Asn
      100          105          110
Phe Cys Lys Arg Pro Asp Ile Ile Arg Lys His Leu Tyr Lys Gly Glu
      115          120          125
Ile Ala Pro Phe Ser Trp Ala Ala Leu His Gly Lys Phe Arg Ser Leu
      130          135          140
Leu Thr Thr Glu Pro Arg Glu Asp Leu
145           150

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<210> 3071

<211> 3343

<212> DNA

<213> Homo sapiens

<400> 3071

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120
atgttcctgg ggatacttcc gcggccgcgc cctgcacag ccgcgccag aggtaaggct
180
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240
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300
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360
cagttctccag gggagctcag tgtctgtttg tccagcttct cagagttgct gtgcagctgc
420
gatgtggcat aggaacacgc agacacagg agagggcagc ataaggcact gtatggagca
480
gtggccacat tttctgcaga ggaagaaccg atgctggaac gtcgttcgag gggccccctg
540
gccatggggc tggccagcc ccgactcctt tctgggccct ccagggagtc accccagacc
600
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660
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720
gctctgtggc ttacaccccg ccggtgccag gcccggtgc ccttgccctg cctgagtggt
780

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900
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960
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1020
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1080
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1140
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1260
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1440
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 3240
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 3343

<210> 3072

<211> 349

<212> PRT

<213> Homo sapiens

<400> 3072

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Pro	Arg	Leu	Leu	Ser	Gly	Pro	Ser	Gln	Glu	Ser	Pro	Gln	Thr	Leu	Gly
			20					25					30		
Lys	Glu	Ser	Arg	Gly	Leu	Arg	Gln	Gln	Gly	Thr	Ser	Val	Ala	Gln	Ser
		35				40					45				
Gly	Ala	Gln	Ala	Pro	Gly	Arg	Ala	His	Arg	Cys	Ala	His	Cys	Arg	Arg
	50				55					60					
His	Phe	Pro	Gly	Trp	Val	Ala	Leu	Trp	Leu	His	Thr	Arg	Arg	Cys	Gln
	65			70				75						80	
Ala	Arg	Leu	Pro	Leu	Pro	Cys	Pro	Glu	Cys	Gly	Arg	Arg	Phe	Arg	His
			85					90						95	
Ala	Pro	Phe	Leu	Ala	Leu	His	Arg	Gln	Val	His	Ala	Ala	Ala	Thr	Pro
			100				105							110	
Asp	Leu	Gly	Phe	Ala	Cys	His	Leu	Cys	Gly	Gln	Ser	Phe	Arg	Gly	Trp

```

115              120              125
Val Ala Leu Val Leu His Leu Arg Ala His Ser Ala Ala Lys Arg Pro
130              135              140
Ile Ala Cys Pro Lys Cys Glu Arg Arg Phe Trp Arg Arg Lys Gln Leu
145              150              155              160
Arg Ala His Leu Arg Arg Cys His Pro Pro Ala Pro Glu Ala Arg Pro
165              170              175
Phe Ile Cys Gly Asn Cys Gly Arg Ser Phe Ala Gln Trp Asp Gln Leu
180              185              190
Val Ala His Lys Arg Val His Val Ala Glu Ala Leu Glu Glu Ala Ala
195              200              205
Ala Lys Ala Leu Gly Pro Arg Pro Arg Gly Arg Pro Ala Val Thr Ala
210              215              220
Pro Arg Pro Gly Gly Asp Ala Val Asp Arg Pro Phe Gln Cys Ala Cys
225              230              235              240
Cys Gly Lys Arg Phe Arg His Lys Pro Asn Leu Ile Ala His Arg Arg
245              250              255
Val His Thr Gly Glu Arg Pro His Gln Cys Pro Glu Cys Gly Lys Arg
260              265              270
Phe Thr Asn Lys Pro Tyr Leu Thr Ser His Arg Arg Ile His Thr Gly
275              280              285
Glu Lys Pro Tyr Pro Cys Lys Glu Cys Gly Arg Arg Phe Arg His Lys
290              295              300
Pro Asn Leu Leu Ser His Ser Lys Ile His Xaa Ser Asp Pro Arg Gly
305              310              315              320
Arg Pro Arg Pro Pro Ala Arg Gly Ala Pro Ser Cys Gln Pro Ala
325              330              335
Pro Arg Ser Pro Arg Pro Ser Pro Pro Arg Arg Tyr Leu
340              345

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<210> 3073

<211> 791

<212> DNA

<213> Homo sapiens

<400> 3073

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120
gccggagggg cggggcgggg ggccgcgccc ggaccgcata tccccccacg ggggtcggtg
180
cctgggggatc ctgtccgcat ccaactgcaac atcacggagt catacctctc tgtgcccccc
240
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360
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420
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480
acagaagact tagatcacta tgaatatgaaa gaggaagagc cagctgaggg caagaaatct
540

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gaagatgatg gcattggaaa agaaaacttg gccatcctag agaaaattaa aaagaaccag
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 660
 aaggagctcc agggatatat taccgnntca cagagtttca aaggcggaaa ctatgncagt
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 791

<210> 3074

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3074

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 20 25 30
 Ser Cys Glu Phe Leu Leu Ala Gly Ala Gly Gly Ala Gly Ala Gly Ala
 35 40 45
 Ala Pro Gly Pro His Leu Pro Pro Arg Gly Ser Val Pro Gly Asp Pro
 50 55 60
 Val Arg Ile His Cys Asn Ile Thr Glu Ser Tyr Pro Ala Val Pro Pro
 65 70 75 80
 Ile Trp Ser Val Glu Ser Asp Asp Pro Asn Leu Ala Ala Val Leu Glu
 85 90 95
 Arg Leu Val Asp Ile Lys Lys Gly Asn Thr Leu Leu Leu Gln His Leu
 100 105 110
 Lys Arg Ile Ile Ser Asp Leu Cys Lys Leu Tyr Asn Leu Pro Gln His
 115 120 125
 Pro Asp Val Glu Met Leu Asp Gln Pro Leu Pro Ala Glu Gln Cys Thr
 130 135 140
 Gln Glu Asp Val Ser Ser Glu Asp Glu Asp Glu Glu Met Pro Glu Asp
 145 150 155 160
 Thr Glu Asp Leu Asp His Tyr Glu Met Lys Glu Glu Glu Pro Ala Glu
 165 170 175
 Gly Lys Lys Ser Glu Asp Asp Gly Ile Gly Lys Glu Asn Leu Ala Ile
 180 185 190
 Leu Glu Lys Ile Lys Lys Asn Gln Arg Gln Asp Tyr Leu Asn Gly Ala
 195 200 205
 Val Ser Gly Ser Val Gln Ala Thr Asp Arg Leu Met Lys Glu Leu Gln
 210 215 220
 Gly Tyr Ile Thr Xaa Ser Gln Ser Phe Lys Gly Gly Asn Tyr Xaa Ser
 225 230 235 240
 Ser Asn Ser Trp Asn Asp Ser Leu Tyr Gly Trp Asp Val Gln Leu Leu
 245 250 255
 Lys Val Asp Gln Gly Ser Val
 260

<210> 3075

<211> 603

<212> DNA

<213> Homo sapiens

<400> 3075

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180
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240
gatgtgaaga atgaggtcaa catcatgaac cagctcagcc acgtaaactt gatccaactt
300
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360
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420
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480
gacctcaagc ctgagaacat attgtgtgtc agccagacag ggcacaaat taagatcatt
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ccg
603

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<210> 3076

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3076

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Pro Leu Gly Gly Lys Asn Phe Leu Lys Lys Met Val Gly Lys Asn Pro
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Pro Pro Pro Pro Phe Phe Ser Pro Val Gly Ala Lys Lys Lys Asn
20     25     30
Val Gly Pro Gln Lys Lys Lys Lys Lys Lys Lys Val Leu Gly Gly
35     40     45
Gly Arg Phe Gly Gln Val His Arg Cys Thr Glu Lys Ser Thr Gly Leu
50     55     60
Ala Leu Ala Ala Lys Ile Ile Lys Val Lys Asn Val Lys Asp Arg Glu
65     70     75     80
Asp Val Lys Asn Glu Val Asn Ile Met Asn Gln Leu Ser His Val Asn
85     90     95
Leu Ile Gln Leu Tyr Asp Ala Phe Glu Ser Lys Ser Ser Phe Thr Leu
100    105    110
Ile Met Glu Tyr Val Asp Gly Gly Glu Leu Phe Asp Arg Ile Thr Asp
115    120    125
Glu Lys Tyr His Leu Thr Glu Leu Asp Val Val Leu Phe Thr Arg Gln
130    135    140
Ile Cys Glu Gly Val His Tyr Leu His Gln His Tyr Ile Leu His Leu
145    150    155    160
Asp Leu Lys Pro Glu Asn Ile Leu Cys Val Ser Gln Thr Gly His Gln

```

	165		170		175
Ile Lys Ile Ile Asp Phe Gly Leu Ala Arg Arg Tyr Lys Pro Arg Glu					
	180		185		190
Lys Leu Lys Val Asn Phe Gly Thr Pro					
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<210> 3077

<211> 1377

<212> DNA

<213> Homo sapiens

<400> 3077

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120
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360
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660
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1260

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tccccgagaat ggggcctggg ttgtattcat ctgttttcta caggggtttaa gtctcaggag
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 1377

<210> 3078

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3078

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 20 25 30
 Val Gly Ala Leu Pro Arg Gly Pro Arg Gln Asn Ser Arg Leu Gly Leu
 35 40 45
 Pro Leu Leu Leu Met Pro Glu Glu Ala Arg Leu Leu Ala Glu Ile Gly
 50 55 60
 Ala Val Thr Leu Val Ser Ala Pro Arg Pro Asp Ser Arg His His Ser
 65 70 75 80
 Leu Ala Leu Thr Ser Phe Lys Arg Gln Gln Glu Glu Ser Phe Gln Glu
 85 90 95
 Gln Ser Ala Leu Ala Ala Glu Ala Arg Glu Thr Arg Arg Gln Glu Leu
 100 105 110
 Leu Glu Lys Ile Thr Glu Gly Gln Ala Ala Lys Lys Gln Lys Leu Glu
 115 120 125
 Gln Ala Ser Gly Ala Ser Ser Ser Gln Glu Ala Gly Ser Ser Gln Ala
 130 135 140
 Ala Lys Glu Asp Glu Thr Ser Asp Gly Gln Ala Ser Gly Glu Gln Glu
 145 150 155 160
 Glu Ala Gly Pro Ser Ser Ser Gln Ala Gly Pro Ser Asn Gly Val Ala
 165 170 175
 Pro Leu Pro Arg Ser Ala Leu Leu Val Gln Leu Ala Thr Ala Arg Pro
 180 185 190
 Arg Pro Val Lys Ala Arg Pro Leu Asp Trp Arg Val Gln Ser Lys Asp
 195 200 205
 Trp Pro His Ala Gly Arg Pro Ala His Glu Leu Arg Tyr Ser Ile Tyr
 210 215 220
 Arg Asp Leu Trp Glu Arg Gly Phe Phe Leu Ser Ala Ala Gly Lys Phe
 225 230 235 240
 Gly Gly Asp Phe Leu Val Tyr Pro Gly Asp Pro Leu Arg Phe His Ala
 245 250 255
 His Tyr Ile Ala Gln Cys Trp Ala Pro Glu Asp Thr Ile Pro Leu Gln
 260 265 270
 Asp Leu Val Ala Ala Gly Arg Leu Gly Thr Ser Val Arg Lys Thr Leu
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<210> 3079

<211> 1785

<212> DNA

<213> Homo sapiens

<400> 3079

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<210> 3080

<211> 500

<212> PRT

<213> Homo sapiens

<400> 3080

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Val	Ser	Gln	Val	Gln	Pro	Pro	Pro	Ser	Lys	Ala	Ser	Ala	Pro	Glu	Pro
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	50					55				60					
Leu	Glu	Ala	Leu	Gly	Thr	Leu	Ser	Leu	Gly	Thr	Glu	Glu	Lys	Ala	
65				70					75					80	
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Leu	Val	Arg	Arg	Asn	Thr	Gly	Leu	Ser	His	Glu	Leu	Cys	Arg	Val	Ala
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Ile	Gly	Ile	Ile	Val	Gly	His	Ile	Gln	Ala	Ser	Val	Pro	Ala	Ser	Ser
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Cys	Phe	Gly	Ala	Met	Cys	Ser	Leu	Asp	Ala	Ala	Ile	Ile	Ser	Thr	Leu
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      325              330              335
Leu Ala Leu Asn Leu His Leu Pro Ala Ala Asp Gln Asn Val Ile Met
      340              345              350
Ala Ala Leu Ser Lys His Ala Asn Val Lys Ile Phe Ser Glu Lys Leu
      355              360              365
Leu Leu Leu Leu Asn Arg Gly Asp Asp Pro Val Arg Ile Phe Lys His
      370              375              380
Glu Pro Gln Pro Pro His Ser Val Leu Lys Phe Leu Gln Asp Val Phe
385              390              395              400
Gly Ser Pro Ala Thr Ala Ala Ile Phe Tyr His Thr Asp Met Met Ala
      405              410              415
Leu Ile Asp Ile Thr Val Arg His Ile Ala Asp Leu Ser Pro Gly Asp
      420              425              430
Lys Gly Pro Phe Gly Ala Gly Gln Arg Pro Trp Pro Gly Val Pro Arg
      435              440              445
Leu Leu Glu Pro Gly Ser Thr Pro Ser Arg Glu Pro His Pro Val Glu
      450              455              460
Arg Ser Gly Val Pro Ala Leu Thr Ser Ser Trp Ala Ser Gly Cys Pro
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Gly Arg Ser Val
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<210> 3081

<211> 1902

<212> DNA

<213> Homo sapiens

<400> 3081

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<210> 3082

<211> 414

<212> PRT

<213> Homo sapiens

<400> 3082

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Cys	His	Asp	Asp	Ala	Ala	Lys	Phe	Val	His	Leu	Leu	Met	Ser	Pro	Gly		
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Cys	Asn	Tyr	Leu	Val	Gln	Glu	Asp	Phe	Val	Pro	Phe	Leu	Gln	Asp	Val		
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Val	Asn	Thr	His	Pro	Gly	Leu	Ser	Phe	Leu	Lys	Glu	Ala	Ser	Glu	Phe		
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His	Ser	Arg	Tyr	Ile	Thr	Thr	Val	Ile	Gln	Arg	Ile	Phe	Tyr	Ala	Val		
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Gln	Leu	Thr	Glu	Phe	Phe	Ser	Tyr	Glu	His	Phe	Tyr	Val	Ile	Tyr	Cys		
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Lys	Phe	Trp	Glu	Leu	Asp	Thr	Asp	His	Asp	Leu	Leu	Ile	Asp	Ala	Asp		
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Arg	Ile	Phe	Ser	Gly	Ala	Val	Thr	Arg	Gly	Arg	Lys	Val	Gln	Lys	Glu		
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245						250						255					
Glu	Glu	Gln	Cys	Arg	Arg	Leu	Asp	Ser	Met	Ala	Ile	Glu	Ala	Leu	Pro		
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Phe	Gln	Asp	Cys	Leu	Cys	Gln	Met	Leu	Asp	Leu	Val	Lys	Pro	Arg	Thr		
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Glu	Gly	Lys	Ile	Thr	Leu	Gln	Asp	Leu	Lys	Arg	Cys	Lys	Leu	Ala	Asn		
290						295						300					
Val	Phe	Phe	Asp	Thr	Phe	Phe	Asn	Ile	Glu	Lys	Tyr	Leu	Asp	His	Glu		
305						310						315					
Gln	Lys	Glu	Gln	Ile	Ser	Leu	Leu	Arg	Asp	Gly	Asp	Ser	Gly	Gly	Pro		
325						330						335					
Glu	Leu	Ser	Asp	Trp	Glu	Lys	Tyr	Ala	Ala	Glu	Glu	Tyr	Asp	Ile	Leu		
340						345						350					
Val	Ala	Glu	Glu	Thr	Val	Gly	Glu	Pro	Trp	Glu	Asp	Gly	Phe	Glu	Ala		
355						360						365					
Glu	Leu	Ser	Pro	Val	Glu	Gln	Lys	Leu	Ser	Ala	Leu	Arg	Ser	Pro	Leu		
370						375						380					
Ala	Gln	Arg	Pro	Phe	Phe	Glu	Ala	Pro	Ser	Pro	Leu	Gly	Ala	Val	Asp		
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<210> 3083
<211> 610
<212> DNA
<213> Homo sapiens
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<210> 3084
<211> 144
<212> PRT
<213> Homo sapiens

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<400> 3084
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20 25 30
Gln Arg Ser Arg Leu His Ala Ala Asp Trp Ala Gly Arg Ala Arg Ala
35 40 45
Leu Val Gly Asp Ser His Thr Ser Trp Ser Pro Ala Ser Ile Pro Gly
50 55 60
Lys His Tyr Gln Ala Val Gly Leu His Leu Trp Lys Val Glu Lys Arg
65 70 75 80
Arg Val Asn Leu Pro Arg Val Leu Ser Met Pro Pro Val Ala Gly Thr
85 90 95
Ala Cys His Ala Tyr Asp Arg Glu Val His Leu Arg Cys Glu Leu Ser
100 105 110
Pro Gly Tyr Tyr Leu Ala Val Pro Ser Thr Phe Leu Lys Asp Ala Pro
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Gly Glu Phe Leu Leu Arg Val Phe Ser Thr Gly Arg Val Ser Leu Arg
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<210> 3085
<211> 1080
<212> DNA
<213> Homo sapiens

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120
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<210> 3086

<211> 58

<212> PRT

<213> Homo sapiens

<400> 3086

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<210> 3087

<211> 2329

<212> DNA

<213> Homo sapiens

<400> 3087

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 2220
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<210> 3088

<211> 280

<212> PRT

<213> Homo sapiens

<400> 3088

Xaa Glu Lys His Leu Asp Asp Glu Glu Arg Arg Lys Arg Lys Glu Glu
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 Asp Asp Phe Asp Pro Gly Lys Lys Val Glu Val Glu Pro Pro Pro Asp
 35 40 45
 Arg Pro Val Arg Ala Cys Arg Thr Gln Gln Pro Glu Met Glu Arg Thr
 50 55 60
 His Ile Gln Gln Leu Leu Glu His Phe Leu Arg Gln Leu Gln Arg Lys
 65 70 75 80
 Asp Pro His Gly Phe Phe Ala Phe Pro Val Thr Asp Ala Ile Ala Pro
 85 90 95
 Gly Tyr Ser Met Ile Ile Lys His Pro Met Asp Phe Gly Thr Met Lys
 100 105 110
 Asp Lys Ile Val Ala Asn Glu Tyr Lys Ser Val Thr Glu Phe Lys Ala
 115 120 125
 Asp Phe Lys Leu Met Cys Asp Asn Ala Met Thr Tyr Asn Arg Pro Asp

130	135	140
Thr Val Tyr Tyr Lys	Leu Ala Lys Lys Ile	Leu His Ala Gly Phe Lys
145	150	155
Met Met Ser Lys Gln	Ala Ala Leu Leu Gly Asn	Glu Asp Thr Ala Val
165	170	175
Glu Glu Pro Val Pro	Glu Val Val Pro Val Gln	Val Glu Thr Ala Lys
180	185	190
Lys Ser Lys Lys Pro	Ser Arg Glu Val Ile Ser	Cys Met Phe Glu Pro
195	200	205
Glu Gly Asn Ala Cys	Ser Leu Thr Asp Ser Thr	Ala Glu His Val
210	215	220
Leu Ala Leu Val Glu	His Ala Ala Asp Glu Ala	Arg Asp Arg Ile Asn
225	230	235
Arg Phe Leu Pro Gly	Gly Lys Met Gly Tyr Leu	Lys Arg Asn Gly Asp
245	250	255
Gly Ser Leu Leu Tyr	Ser Val Val Asn Thr Ala	Glu Pro Asn Ala Asp
260	265	270
Glu Glu Glu Thr His	Pro Val Thr	
275	280	

<210> 3089

<211> 722

<212> DNA

<213> Homo sapiens

<400> 3089

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 120
 gcccttacaa aggcggcaga ggggtggatta tcttcacctg aattttcaga gctctgtatt
 180
 tgggttaggct ctcaataaaa atcattatgc aacttggaag aaagtatcac gctcgtcggg
 240
 agagatgacc tagagagctt ccagcttgag ataagtggtt ttttaaaaga gatggcctgt
 300
 ccatactcgg tactcgtctc aggagacatt aaagagcgcc tcacaaagaa ggatgactgc
 360
 ttgaaacttc tgttgttttt aagtacagaa cttcaagctt tacaaatatt acagaacaa
 420
 aaacataaaa attctcaatt agataaaaat agtgaagttt atcaggaagt tcaagctatg
 480
 ttgtatacac ttgttatacc caagtcaaca actctctgaca ttcgcgatat gctaaaccaa
 540
 gtggaatcaa aggtgaaaga tattctctca aaggtccaga aaaatcatgt gggaaaacca
 600
 ctactgaaaa tggattttaa ttcagaacag gcggaacaac tggaaagaat caatgatgct
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 720
 ca
 722

<210> 3090

<211> 240

<212> PRT

<213> Homo sapiens

<400> 3090

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Xaa Ala Leu Asp Gln Ala Thr Met Arg Gly Pro Glu Leu Gly Pro Glu
 1      5      10      15
Thr Ser Met Glu Gly Asp Val Leu Asp Thr Leu Glu Ala Leu Gly Tyr
      20      25      30
Lys Gly Pro Leu Leu Glu Glu Gln Ala Leu Thr Lys Ala Ala Glu Gly
      35      40      45
Gly Leu Ser Ser Pro Glu Phe Ser Glu Leu Cys Ile Trp Leu Gly Ser
      50      55      60
Gln Ile Lys Ser Leu Cys Asn Leu Glu Glu Ser Ile Thr Ser Ala Gly
65      70      75      80
Arg Asp Asp Leu Glu Ser Phe Gln Leu Glu Ile Ser Gly Phe Leu Lys
      85      90      95
Glu Met Ala Cys Pro Tyr Ser Val Leu Val Ser Gly Asp Ile Lys Glu
      100      105      110
Arg Leu Thr Lys Lys Asp Asp Cys Leu Lys Leu Leu Phe Leu Ser
      115      120      125
Thr Glu Leu Gln Ala Leu Gln Ile Leu Gln Asn Lys Lys His Lys Asn
      130      135      140
Ser Gln Leu Asp Lys Asn Ser Glu Val Tyr Gln Glu Val Gln Ala Met
145      150      155      160
Phe Asp Thr Leu Gly Ile Pro Lys Ser Thr Thr Ser Asp Ile Pro His
      165      170      175
Met Leu Asn Gln Val Glu Ser Lys Val Lys Asp Ile Leu Ser Lys Val
      180      185      190
Gln Lys Asn His Val Gly Lys Pro Leu Leu Lys Met Asp Leu Asn Ser
      195      200      205
Glu Gln Ala Glu Gln Leu Glu Arg Ile Asn Asp Ala Leu Ser Cys Glu
      210      215      220
Tyr Glu Cys Arg Arg Arg Met Leu Met Lys Arg Leu Asp Val Thr Val
225      230      235      240

```

<210> 3091

<211> 333

<212> DNA

<213> Homo sapiens

<400> 3091

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120
ccaggggcga ccccttctgc caagtgtccc aaaatgattg ctaaatgcct ggctccccca
180
ctctttgact ccattctcttg gtccctcttt tctgtgtgcca gctccccaga ctcttccctg
240
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300
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333

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<210> 3092
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 3092
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 20 25 30
 Ser Arg Lys Arg Glu Pro Arg Asp Gly Val Lys Glu Trp Gly Ser Gln
 35 40 45
 Ala Phe Ser Asn His Phe Gly Thr Leu Gly Arg Arg Gly Arg Pro Gly
 50 55 60
 Gly Thr Lys Gly Leu Gly Cys Ser Leu Ser Val Pro Asp Pro Cys Gln
 65 70 75 80
 Ala Lys Met Val Trp Gln Arg Gly Glu Gln Leu Leu Pro Arg Ala Ser
 85 90 95
 Phe Pro Ser Ala Pro Phe Thr Arg
 100

<210> 3093
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 3093
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 120
 aggggggcag ctgtgggcag tgactctgtc tgtctttgga caggacaagg actgccatcc
 180
 accatggtga agctgggctg cagcttctct gggaagccag gtaaagacc tggggaccag
 240
 gatggggctg ccatggacag tgtgcctctg atcagcccct tggacatcag ccagctccag
 300
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 360
 gaccagcaga atttccctga cctggagggc cagaggctga actgcagcca cccagaggaa
 420
 gggcgagggc tgcccaccgc acggatgac gccttcgcca tggcgctact gggctcgctg
 480
 ctgatcatgt acaaggccat ctggtacgac cagttcacct gcccgcagcg ctctctgctg
 540
 cggcacaaga tctgcacgcc gctgaccctg gagatgtact acacggagat ggaccgccag
 600
 cgccaccgca gcatcctggc ggccatcggg gcttaccgc tgagccgcaa gcaaggcagc
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 720

<210> 3094

<211> 179

<212> PRT

<213> Homo sapiens

<400> 3094

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Met Val Lys Leu Gly Cys Ser Phe Ser Gly Lys Pro Gly Lys Asp Pro
 1          5          10          15
Gly Asp Gln Asp Gly Ala Ala Met Asp Ser Val Pro Leu Ile Ser Pro
      20          25          30
Leu Asp Ile Ser Gln Leu Gln Pro Leu Pro Asp Gln Val Val Ile
      35          40          45
Lys Thr Gln Thr Glu Tyr Gln Leu Ser Ser Pro Asp Gln Gln Asn Phe
      50          55          60
Pro Asp Leu Glu Gly Gln Arg Leu Asn Cys Ser His Pro Glu Glu Gly
      65          70          75          80
Arg Arg Leu Pro Thr Ala Arg Met Ile Ala Phe Ala Met Ala Leu Leu
      85          90          95
Gly Cys Val Leu Ile Met Tyr Lys Ala Ile Trp Tyr Asp Gln Phe Thr
      100          105          110
Cys Pro Asp Gly Phe Leu Leu Arg His Lys Ile Cys Thr Pro Leu Thr
      115          120          125
Leu Glu Met Tyr Tyr Thr Glu Met Asp Pro Glu Arg His Arg Ser Ile
      130          135          140
Leu Ala Ala Ile Gly Ala Tyr Pro Leu Ser Arg Lys His Gly Thr Glu
      145          150          155          160
Thr Pro Ala Ala Trp Gly Asp Gly Tyr Arg Ala Ala Lys Glu Glu Arg
      165          170          175

Lys Gly Pro

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<210> 3095

<211> 519

<212> DNA

<213> Homo sapiens

<400> 3095

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120
gggtttgacg aggtctttgt catcagcctg gctcgcaggc ctgacgcctg ggaacgcatt
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ctcgcctcgc tctgggagat ggagatctct gggaggggtg tggatgctgt ggatggctgg
240
atgctcaaca gcaagtccat caggaacctc ggcgtagacc tgctcccggg ctaccaggac
300
ccttactcgg gccgcactct gaccaagggc gaggtgggct gcttcctcag ccattactcc
360
atctggggaag agcagcagc acaaggcaca cttctggcca cgggacctgg tggccttctc
420
cgcccagccc ctgctcgtg cccctaccca ctatgccggg gacgccaggt ggctcagtga
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519

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<210> 3096
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 3096
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 Thr Arg Gly Arg Pro Gln Gln Gln Ala Ser Ala His Val Thr Arg
 20 25 30
 Pro Ser Lys Arg Pro Ser Lys Ile Gly Phe Asp Glu Val Phe Val Ile
 35 40 45
 Ser Leu Ala Arg Arg Pro Asp Arg Arg Glu Arg Met Leu Ala Ser Leu
 50 55 60
 Trp Glu Met Glu Ile Ser Gly Arg Val Val Asp Ala Val Asp Gly Trp
 65 70 75 80
 Met Leu Asn Ser Ser Ala Ile Arg Asn Leu Gly Val Asp Leu Leu Pro
 85 90 95
 Gly Tyr Gln Asp Pro Tyr Ser Gly Arg Thr Leu Thr Lys Gly Glu Val
 100 105 110
 Gly Cys Phe Leu Ser His Tyr Ser Ile Trp Glu Glu Arg Ala Val Gln
 115 120 125
 Gly Thr Leu Leu Ala Thr Gly Pro Gly Gly Leu Leu Arg Pro Ala Pro
 130 135 140
 Ala Arg Cys Pro Tyr Pro Leu Cys Arg Gly Arg Val Ala Gln
 145 150 155

<210> 3097
 <211> 4953
 <212> DNA
 <213> Homo sapiens

<400> 3097
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 180
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 240
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 300
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 420
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 480
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 540
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cggacatttg ggtttgcctt cacattttat gaagaggatga ctacgaagca gatctgcagt
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720
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780
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900
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3840

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4953

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<210> 3098

<211> 1359

<212> PRT

<213> Homo sapiens

<400> 3098

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                20             25             30
Gly Pro Ser Arg Gly Ser Gly Gly Gly Gly Arg Gly Gly Leu Arg Ala
                35             40             45
Asp Gly Arg Ala Pro Gly Leu Arg Gly Leu Gly Ala Ala Pro His Cys
                50             55             60
Pro Ala Gly Leu Gly Pro Gly Ala Met Ser Gly Gly Gly Gly Gly Gly

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65              70              75              80
Gly Ser Ala Pro Ser Arg Phe Ala Asp Tyr Phe Val Ile Cys Gly Leu
85              90
Asp Thr Glu Thr Gly Leu Glu Pro Asp Glu Leu Ser Ala Leu Cys Gln
100            105            110
Tyr Ile Gln Ala Ser Lys Ala Arg Asp Gly Ala Ser Pro Phe Ile Ser
115            120            125
Ser Thr Thr Glu Gly Glu Asn Phe Glu Gln Thr Pro Leu Arg Arg Thr
130            135            140
Phe Lys Ser Lys Val Leu Ala Arg Tyr Pro Glu Asn Val Glu Trp Asn
145            150            155
Pro Phe Asp Gln Asp Ala Val Gly Met Leu Cys Met Pro Lys Gly Leu
165            170            175
Ala Phe Lys Thr Gln Ala Asp Pro Arg Glu Pro Gln Phe His Ala Phe
180            185            190
Ile Ile Thr Arg Glu Asp Gly Ser Arg Thr Phe Gly Phe Ala Leu Thr
195            200            205
Phe Tyr Glu Glu Val Thr Ser Lys Gln Ile Cys Ser Ala Met Gln Thr
210            215            220
Leu Tyr His Met His Asn Ala Glu Tyr Asp Val Leu His Ala Pro Pro
225            230            235
Ala Asp Asp Arg Asp Gln Ser Ser Met Glu Asp Gly Glu Asp Thr Pro
245            250            255
Val Thr Lys Leu Gln Arg Phe Asn Ser Tyr Asp Ile Ser Arg Asp Thr
260            265            270
Leu Tyr Val Ser Lys Cys Ile Cys Leu Ile Thr Pro Met Ser Phe Met
275            280            285
Lys Ala Cys Arg Ser Val Pro Gly Gln Leu His Gln Ala Val Thr Ser
290            295            300
Pro Gln Pro Pro Pro Leu Pro Leu Glu Ser Tyr Ile Tyr Asn Val Leu
305            310            315
Tyr Glu Val Pro Leu Pro Pro Pro Gly Arg Ser Leu Lys Phe Ser Gly
325            330            335
Val Tyr Trp Pro Ile Ile Cys Gln Arg Pro Ser Thr Asn Glu Leu Pro
340            345            350
Leu Phe Asp Phe Pro Val Lys Glu Val Phe Glu Leu Leu Gly Val Glu
355            360            365
Asn Val Phe Gln Leu Phe Thr Cys Ala Leu Leu Glu Phe Gln Ile Leu
370            375            380
Leu Tyr Ser Gln His Tyr Gln Arg Leu Met Thr Val Ala Glu Thr Ile
385            390            395
Thr Ala Leu Met Phe Pro Phe Gln Trp Gln His Val Tyr Val Pro Ile
405            410            415
Leu Pro Ala Ser Leu Leu His Phe Leu Asp Ala Pro Val Pro Tyr Leu
420            425            430
Met Gly Leu His Ser Asn Gly Leu Asp Asp Arg Ser Lys Leu Glu Leu
435            440            445
Pro Gln Glu Ala Asn Leu Cys Phe Val Asp Ile Asp Asn His Phe Ile
450            455            460
Glu Leu Pro Glu Asp Leu Pro Gln Phe Pro Asn Lys Leu Glu Phe Val
465            470            475
Gln Glu Val Ser Glu Ile Leu Met Ala Phe Gly Ile Pro Pro Glu Gly
485            490            495
Asn Leu His Cys Ser Glu Ser Ala Ser Lys Leu Lys Arg Leu Arg Ala

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500				505				510							
Ser	Glu	Leu	Val	Ser	Asp	Lys	Arg	Asn	Gly	Asn	Ile	Ala	Gly	Ser	Pro
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Leu	His	Ser	Tyr	Glu	Leu	Leu	Lys	Glu	Asn	Glu	Thr	Ile	Ala	Arg	Leu
530				535				540							
Gln	Ala	Leu	Val	Lys	Arg	Thr	Gly	Val	Ser	Leu	Glu	Lys	Leu	Glu	Val
545				550				555							
Arg	Glu	Asp	Pro	Ser	Asn	Lys	Asp	Leu	Lys	Val	Gln	Cys	Asp	Glu	
565				570				575							
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580				585				590							
Ala	Asn	Arg	Ph	Thr	Gln	Met	Ph	Ala	Asp	Tyr	Glu	Val	Ph	Val	Ile
595				600				605							
Gln	Pro	Ser	Gln	Asp	Lys	Glu	Ser	Trp	Ph	Thr	Asn	Arg	Glu	Gln	Met
610				615				620							
Gln	Asn	Ph	Asp	Lys	Ala	Ser	Ph	Leu	Ser	Asp	Gln	Pro	Glu	Pro	Tyr
625				630				635							
Leu	Pro	Ph	Leu	Ser	Arg	Ph	Leu	Glu	Thr	Gln	Met	Ph	Ala	Ph	Ph
645				650				655							
Ile	Asp	Asn	Lys	Ile	Met	Cys	His	Asp	Asp	Asp	Lys	Asp	Pro	Val	
660				665				670							
Leu	Arg	Val	Ph	Asp	Ser	Arg	Val	Asp	Lys	Ile	Arg	Leu	Leu	Asn	Val
675				680				685							
Arg	Thr	Pro	Thr	Leu	Arg	Thr	Ser	Met	Tyr	Gln	Lys	Cys	Thr	Thr	Val
690				695				700							
Asp	Glu	Ala	Glu	Lys	Ala	Ile	Glu	Leu	Arg	Leu	Ala	Lys	Ile	Asp	His
705				710				715							
Thr	Ala	Ile	His	Pro	His	Leu	Leu	Asp	Met	Lys	Ile	Gly	Gln	Gly	Lys
725				730				735							
Tyr	Glu	Pro	Gly	Ph	Ph	Pro	Lys	Leu	Gln	Ser	Asp	Val	Leu	Cys	Thr
740				745				750							
Gly	Pro	Ala	Ser	Asn	Lys	Trp	Thr	Lys	Arg	Asn	Ala	Pro	Ala	Gln	Trp
755				760				765							
Arg	Arg	Lys	Asp	Arg	Gln	Lys	Gln	His	Thr	Glu	His	Leu	Arg	Leu	Asp
770				775				780							

930	935	940
Asn Ile Gly Glu Ile Lys Thr Asp Val Gly Lys Ala Arg Ala Trp Val		
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Arg Leu Ser Met Glu Lys Lys Leu Leu Ser Arg His Leu Lys Gln Leu		960
	965	970
Leu Ser Asp His Glu Leu Thr Lys Lys Leu Tyr Lys Arg Tyr Ala Phe		975
	980	985
Leu Arg Cys Asp Asp Glu Lys Glu Gln Phe Leu Tyr His Leu Leu Ser		990
	995	1000
Phe Asn Ala Val Asp Tyr Phe Cys Phe Thr Asn Val Phe Thr Thr Ile		1005
	1010	1015
Leu Ile Pro Tyr His Ile Leu Ile Val Pro Ser Lys Lys Leu Gly Gly		1020
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Ser Met Phe Thr Ala Asn Pro Trp Ile Cys Ile Ser Gly Glu Leu Gly		1035
	1040	1045
Glu Thr Gln Ile Met Gln Ile Pro Arg Asn Val Leu Glu Met Thr Phe		1050
	1055	1060
Glu Cys Gln Asn Leu Gly Lys Leu Thr Thr Val Gln Ile Gly His Asp		1065
	1070	1075
Asn Ser Gly Leu Tyr Ala Lys Trp Leu Val Glu Tyr Val Met Val Arg		1080
	1085	1090
Asn Glu Ile Thr Gly His Thr Tyr Lys Phe Pro Cys Gly Arg Trp Leu		1100
	1095	1105
Gly Lys Gly Met Asp Asp Gly Ser Leu Glu Arg Ile Leu Val Gly Glu		1110
	1115	1120
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	1130	1135
Pro Leu Gln Gln Ser Pro Ser Val Ile Arg Arg Leu Val Thr Ile Ser		1140
	1145	1150
Pro Asn Asn Lys Pro Lys Leu Asn Thr Gly Gln Ile Gln Glu Ser Ile		1155
	1160	1165
Gly Glu Ala Val Asn Gly Ile Val Lys His Phe His Lys Pro Glu Lys		1170
	1175	1180
Glu Arg Gly Ser Leu Thr Leu Leu Lys Cys Gly Glu Cys Gly Leu Val		1185
	1190	1195
Ser Ala Leu Glu Gln Ala Phe Gln His Gly Phe Lys Ser Pro Arg Leu		1200
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Phe Lys Asn Val Phe Ile Trp Asp Phe Leu Glu Lys Ala Gln Thr Tyr		1215
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Tyr Glu Thr Leu Glu Lys Asn Glu Val Val Pro Glu Glu Asn Trp His		1230
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Thr Arg Ala Arg Asn Phe Cys Arg Phe Val Thr Ala Ile Asn Asn Thr		1245
	1250	1255
Pro Arg Asn Ile Gly Lys Asp Gly Lys Phe Gln Met Leu Val Cys Leu		1260
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Gly Ala Arg Asp His Leu Leu His His Trp Ile Ala Leu Leu Ala Asp		1275
	1280	1285
Cys Pro Ile Thr Ala His Met Tyr Glu Asp Val Ala Leu Ile Lys Asp		1290
	1295	1300
His Thr Leu Val Asn Ser Leu Ile Arg Val Leu Gln Thr Leu Gln Glu		1305
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 <212> DNA
 <213> Homo sapiens

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<210> 3100
 <211> 159
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Gly Lys Ile Met Cys Lys Ile Thr Ser Ala Leu Tyr Thr Leu Asn Phe

50	55	60
Val Ser Gly Met Gln Phe Leu Ala Cys Ile Ser Ile Asp Arg Tyr Val		
65	70	75
Ala Val Thr Lys Val Pro Ser Gln Ser Gly Val Gly Lys Pro Cys Trp		80
	85	90
Ile Ile Cys Phe Cys Val Trp Met Ala Ala Ile Leu Leu Ser Ile Pro		95
	100	105
Gln Leu Val Phe Tyr Thr Val Asn Asp Asn Ala Arg Cys Ile Pro Ile		110
	115	120
Phe Pro Arg Tyr Leu Gly Thr Ser Met Lys Ala Leu Ile His Met Leu		125
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Glu Ile Cys Ile Gly Phe Val Val Pro Phe Leu Ile Met Gly Val		140
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<210> 3101

<211> 2623

<212> DNA

<213> Homo sapiens

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<210> 3102
 <211> 410
 <212> PRT
 <213> Homo sapiens

<400> 3102

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          35          40          45
Pro Pro Asp Asp Leu Asp Leu Phe Pro Thr Pro Asp Pro His Tyr Glu
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Lys Lys Tyr Tyr Phe Pro Val Arg Glu Leu Glu Arg Ser Leu Arg Phe
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Asp Met Lys Gly Asp Asp Val Ile Val Phe Leu His Ile Gln Lys Thr
          85          90          95
Gly Gly Thr Thr Phe Gly Arg His Leu Val Gln Asn Val Arg Leu Glu
          100          105          110
Val Pro Cys Asp Cys Arg Pro Gly Gln Lys Lys Cys Thr Cys Tyr Arg
          115          120          125
Pro Asn Arg Arg Glu Thr Trp Leu Phe Ser Arg Phe Ser Thr Gly Trp
          130          135          140
Ser Cys Gly Leu His Ala Asp Trp Thr Glu Leu Thr Asn Cys Val Pro
          145          150          155
Gly Val Leu Asp Arg Arg Asp Ser Ala Ala Leu Arg Thr Pro Arg Lys
          160          165          170
Phe Tyr Tyr Ile Thr Leu Leu Arg Asp Pro Val Ser Arg Tyr Leu Ser
          175          180          185
Glu Trp Arg His Val Gln Arg Gly Ala Thr Trp Lys Thr Ser Leu His
          190          195          200
Met Cys Asp Gly Arg Thr Pro Thr Pro Glu Glu Leu Pro Pro Cys Tyr
          205          210          215
Glu Gly Thr Asp Trp Ser Gly Cys Thr Leu Gln Glu Phe Met Asp Cys
          220          225          230
Pro Tyr Asn Leu Ala Asn Asn Arg Gln Val Arg Met Leu Ala Asp Leu
          235          240          245
Ser Leu Val Gly Cys Tyr Asn Leu Ser Phe Ile Pro Glu Gly Lys Arg
          250          255          260
Ala Gln Leu Leu Leu Glu Ser Ala Lys Lys Asn Leu Arg Gly Met Ala
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Phe Phe Gly Leu Thr Glu Phe Gln Arg Lys Thr Gln Tyr Leu Phe Glu
          280          285          290
Arg Thr Phe Asn Leu Lys Phe Ile Arg Pro Phe Met Gln Tyr Asn Ser
          295          300          305
Thr Arg Ala Gly Gly Val Glu Val Asp Glu Asp Thr Ile Arg Arg Ile
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Glu Glu Leu Asn Asp Leu Asp Met Gln Leu Tyr Asp Tyr Ala Lys Asp
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Leu Phe Gln Gln Arg Tyr Gln Tyr Lys Arg Gln Leu Glu Arg Arg Glu
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Gln Arg Leu Arg Ser Arg Glu Glu Arg Leu Leu His Arg Ala Lys Glu
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370		375		380												
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<210> 3103

<211> 1228

<212> DNA

<213> Homo sapiens

<400> 3103

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Ala Ala Ala Trp Gln Arg Ala Ser Leu Gly Gln Trp Xaa Arg Arg Pro
 50 55 60
 Val Ala Ala Leu Ala Pro Tyr Ser Asp Ser Leu Val Glu Pro Leu Val
 65 70 75 80
 Cys Arg Leu Gln Val Leu Phe Leu Lys Lys Ala Gly Ser Glu Arg Pro
 85 90 95
 Cys Glu Thr Thr Pro Gly Ala Lys Gly Asp Ser His Lys Thr Gln Val
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<210> 3105
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 <212> DNA
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<400> 3106

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<213> Homo sapiens

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<212> DNA

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Tyr	Pro	Lys	Ala	Cys	Leu	Gln	Gly	Ile	Thr	Phe	Thr	Arg	Asp	Gly	Arg
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Tyr	Met	Ala	Leu	Ala	Glu	Arg	Arg	Asp	Cys	Lys	Asp	Tyr	Val	Ser	Ile
			85					90						95	
Phe	Val	Cys	Ser	Asp	Trp	Gln	Leu	Leu	Arg	His	Phe	Asp	Thr	Asp	Thr
			100					105					110		
Gln	Asp	Leu	Thr	Gly	Ile	Glu	Trp	Ala	Pro	Asn	Gly	Cys	Val	Leu	Ala
		115					120					125			
Val	Trp	Asp	Thr	Cys	Leu	Glu	Tyr	Lys	Ile	Leu	Leu	Tyr	Ser	Leu	Asp
		130				135					140				
Gly	Arg	Leu	Leu	Ser	Thr	Tyr	Ser	Ala	Xaa	Arg	Val	Val	Xaa	Leu	Gly

145		150		155		160									
Ile	Lys	Ser	Val	Ala	Trp	Ser	Pro	Ser	Ser	Gln	Phe	Leu	Ala	Val	Gly
			165					170						175	
Ser	Tyr	Asp	Gly	Lys	Val	Arg	Ile	Leu	Asn	His	Val	Thr	Trp	Lys	Met
			180					185						190	
Ile	Thr	Glu	Phe	Gly	His	Pro	Cys	Ser	Pro	Ile	Asn	Asp	Ser	Gln	
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<210> 3111

<211> 1269

<212> DNA

<213> Homo sapiens

<400> 3111

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240
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420
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 gtcattccac
 1269

<210> 3112
 <211> 151
 <212> PRT
 <213> Homo sapiens

<400> 3112
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 Glu Gly Arg Arg Gly Ala Arg Thr Ala Gly Leu Arg Gly Arg Pro Trp
 35 40 45
 Arg Asp Trp Glu Glu Arg Arg Gly Val Thr Thr Val Gln His Pro Glu
 50 55 60
 Lys Ser Asp Trp Gln Thr Arg Thr Gly Gln Pro Cys Ser Cys Met Ile
 65 70 75 80
 Gln Glu Leu Ala Ser Glu Arg Glu Ser Val Ala Glu Ala Gly Gly Ser
 85 90 95
 Ala Arg Gln Lys Val Arg Gly Leu Val Leu Arg Arg Gly Lys Arg Gln
 100 105 110
 Ser Glu Ser Leu His Ala Pro Gly Leu His Gly Arg Ala Arg Ala Ser
 115 120 125
 Gln Lys Arg Val Asn Asp Pro Glu Cys Asp Trp Glu Gly Glu Leu Ile
 130 135 140
 Pro Tyr Gln Glu Thr Gly Ser
 145 150

<210> 3113
 <211> 631
 <212> DNA
 <213> Homo sapiens

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 ccaaaaggga aggagatagt aagcctgctg gaaagaaaca taccctgtac aatgtacatc
 180
 accatcgga cccggaactt gcagaaatat gtgagccgca ctctcggtgt gtttgtctcc
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 420
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 480

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<210> 3114
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 <212> PRT
 <213> Homo sapiens

<400> 3114
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 35 40 45
 Leu Leu Glu Arg Asn Ile Thr Val Thr Met Tyr Ile Thr Ile Gly Thr
 50 55 60
 Arg Asn Leu Gln Lys Tyr Val Ser Arg Thr Ser Val Val Phe Val Ser
 65 70 75 80
 Ile Ser Phe Ile Val Leu Met Ile Ile Ser Leu Ala Trp Leu Val Phe
 85 90 95
 Tyr Tyr Ile Gln Arg Phe Arg Tyr Ala Asn Ala Arg Asp Arg Asn Gln
 100 105 110
 Arg Arg Leu Gly Asp Ala Ala Lys Lys Ala Ile Ser Lys Leu Gln Ile
 115 120 125
 Arg Thr Ile Lys Lys Gly Asp Lys Glu Thr Glu Ser Asp Phe Asp Asn
 130 135 140
 Cys Ala Val Cys Ile Glu Gly Tyr Lys Pro Asn Asp Val Val Arg Ile
 145 150 155 160
 Leu Pro Cys Arg His Leu Phe His Lys Ser Cys Val Asp Pro Trp Leu
 165 170 175
 Leu Asp His Arg Thr Cys Pro Met Cys Lys Met Asn Ile Leu Lys Ala
 180 185 190
 Leu Gly Ile Pro Pro Asn Ala Asp Cys Met Asp Asp Phe Ala Thr Asp
 195 200 205
 Phe Glu
 210

<210> 3115
 <211> 1366
 <212> DNA
 <213> Homo sapiens

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 gcagaaaaga tggaaaaaag gacatgtgca ctctgcccc aagatgtcga atataatgtc
 180

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 420
 aagaaggacg acgcagttcc acagtctgat ggagttcgag gaatttataa actgctttgc
 480
 cagcaacatg ctcaattccc gatcatcgct caaagtggta aattttcagg agtgaaaaga
 540
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 600
 tgtaatacat tcataagaca agtgaaagaa gagcatggca gacacacaga tgcaactgtg
 660
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 720
 aatattagac aaagttcatt caattccaga aaaactcatg gatgagacta cttcagaatc
 780
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 1366

<210> 3116

<211> 191

<212> PRT

<213> Homo sapiens

<400> 3116

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Val	Leu	Tyr	Phe	Ala	Gln	Ser	Glu	Asn	Ile	Ala	Ala	His	Glu	Asn	Cys
			20					25					30		
Leu	Leu	Tyr	Ser	Ser	Gly	Leu	Val	Glu	Cys	Glu	Asp	Gln	Asp	Pro	Leu
			35				40					45			
Asn	Pro	Asp	Arg	Ser	Phe	Asp	Val	Glu	Ser	Val	Lys	Lys	Glu	Ile	Gln

50		55		60
Arg Gly Arg Lys Leu Lys Cys Lys Phe Cys His Lys Arg Gly Ala Thr				
65	70	75	80	
Val Gly Cys Asp Leu Lys Asn Cys Asn Lys Asn Tyr His Phe Phe Cys				
85	90	95		
Ala Lys Lys Asp Asp Ala Val Pro Gln Ser Asp Gly Val Arg Gly Ile				
100	105	110		
Tyr Lys Leu Leu Cys Gln Gln His Ala Gln Phe Pro Ile Ile Ala Gln				
115	120	125		
Ser Gly Lys Phe Ser Gly Val Lys Arg Lys Arg Gly Arg Lys Lys Pro				
130	135	140		
Leu Ser Gly Asn His Val Gln Pro Pro Glu Thr Met Lys Cys Asn Thr				
145	150	155	160	
Phe Ile Arg Gln Val Lys Glu Glu His Gly Arg His Thr Asp Ala Thr				
165	170	175		
Val Lys Val Pro Phe Leu Lys Lys Cys Lys Xaa Ser Arg Thr Ser				
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<210> 3117

<211> 1373

<212> DNA

<213> Homo sapiens

<400> 3117

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300
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720
ctcctcttgc cgcagccgga cctgcgctac ctcttctcta gcggcaacaa gctggccagg
780
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840
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900

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 1020
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 1080
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 1260
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<210> 3118

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3118

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Ser	Ser	Ile	Ser	Cys	Gln	Pro	Pro	Ala	Glu	Ile	Pro	Gly	Tyr	Leu	Pro
			20					25					30		
Ala	Asp	Thr	Val	His	Leu	Ala	Val	Glu	Phe	Phe	Asn	Leu	Thr	His	Leu
		35				40						45			
Pro	Ala	Asn	Leu	Leu	Gln	Gly	Ala	Ser	Lys	Leu	Gln	Glu	Leu	His	Leu
	50				55					60					
Ser	Ser	Asn	Gly	Leu	Glu	Ser	Leu	Ser	Pro	Glu	Phe	Leu	Arg	Pro	Val
65				70					75				80		
Pro	Gln	Leu	Arg	Val	Leu	Asp	Leu	Thr	Arg	Asn	Ala	Leu	Thr	Gly	Leu
			85					90						95	
Pro	Pro	Gly	Leu	Phe	Gln	Ala	Ser	Ala	Thr	Leu	Asp	Thr	Leu	Val	Leu
		100						105					110		
Lys	Glu	Asn	Gln	Leu	Glu	Val	Leu	Glu	Val	Ser	Trp	Leu	His	Gly	Leu
	115				120							125			
Lys	Ala	Leu	Gly	His	Leu	Asp	Leu	Ser	Gly	Asn	Arg	Leu	Arg	Lys	Leu
	130				135					140					
Pro	Pro	Gly	Leu	Leu	Ala	Asn	Phe	Thr	Leu	Leu	Arg	Thr	Leu	Asp	Leu
145				150					155					160	
Gly	Glu	Asn	Gln	Leu	Glu	Thr	Leu	Pro	Pro	Asp	Leu	Leu	Arg	Gly	Pro
			165					170						175	
Leu	Gln	Leu	Glu	Arg	Leu	His	Leu	Glu	Gly	Asn	Lys	Leu	Gln	Val	Leu
	180						185					190			
Gly	Lys	Asp	Leu	Leu	Pro	Gln	Pro	Asp	Leu	Arg	Tyr	Leu	Phe	Leu	
	195				200					205					
Ser	Gly	Asn	Lys	Leu	Ala	Arg	Val	Ala	Ala	Gly	Ala	Phe	Gln	Gly	Leu
210				215						220					
Arg	Gln	Leu	Asp	Met	Leu	Asp	Leu	Ser	Asn	Asn	Ser	Leu	Ala	Ser	Val
225				230						235				240	
Pro	Glu	Gly	Leu	Trp	Ala	Ser	Leu	Gly	Gln	Pro	Asn	Trp	Asp	Met	Arg

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                245                250                255
Asp Gly Phe Asp Ile Ser Gly Asn Pro Trp Ile Cys Asp Gln Asn Leu
                260                265                270
Ser Asp Leu Tyr Arg Trp Leu Gln Ala Gln Lys Asp Lys Met Phe Ser
                275                280                285
Gln Asn Asp Thr Arg Cys Ala Gly Pro Glu Ala Val Lys Gly Gln Thr
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Leu Leu Ala Val Ala Lys Ser Gln
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<210> 3119
 <211> 427
 <212> DNA
 <213> Homo sapiens

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<400> 3119
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120
tacgtggagg tgggtcccctg ttccacagag gagatgagcc gagtgctgat ggggggcacc
180
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240
tacaccacct tccaagccac cccaacgctc attccacgg agacggcgagc tctatacccc
300
tccttcagcagc tgctcccagc tgccagggtg cctgctgccc ccacccctgt tgcctactat
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aacgcgt
427

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<210> 3120
 <211> 142
 <212> PRT
 <213> Homo sapiens

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<400> 3120
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Ile Gln Met Thr Ser Ala Glu Arg Ala Leu Ala Ala Gln Arg Cys
20          25          30
His Lys Lys Val Met Lys Glu Arg Tyr Val Glu Val Val Pro Cys Ser
35          40          45
Thr Glu Glu Met Ser Arg Val Leu Met Gly Gly Thr Leu Gly Arg Ser
50          55          60
Gly Met Ser Pro Pro Pro Cys Lys Leu Pro Cys Leu Ser Pro Pro Thr
65          70          75          80
Tyr Thr Thr Phe Gln Ala Thr Pro Thr Leu Ile Pro Thr Glu Thr Ala
85          90          95
Ala Leu Tyr Pro Ser Ser Ala Leu Leu Pro Ala Ala Arg Val Pro Ala
100         105         110
Ala Pro Thr Pro Val Ala Tyr Tyr Pro Gly Pro Ala Thr Gln Leu Tyr

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      115              120              125
Leu Asn Tyr Thr Ala Tyr Tyr Pro Ser Pro Glu Asp Asn Ala
   130              135              140

<210> 3121
<211> 284
<212> DNA
<213> Homo sapiens

<400> 3121
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120
taagaggaaac atgaacctgg acggggcagc ttccattgtc cctctcctgc tcctgctaata
180
gaacaaggcc tccccagagt atgaagagaa catgcacaga taccagaagg cagccaagct
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284

<210> 3122
<211> 91
<212> PRT
<213> Homo sapiens

<400> 3122
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 1          5          10          15
Gly Pro Ser Glu Asp Phe Ser Thr Ser Ala Ala Thr Ser Ala Ala Ser
          20          25          30
Ser His Val Arg Arg Asn Lys Arg Asn Met Asn Leu Asp Gly Ala Ala
          35          40          45
Ser Ile Val Pro Leu Leu Leu Leu Met Asn Lys Ala Ser Pro Glu
          50          55          60
Tyr Glu Glu Asn Met His Arg Tyr Gln Lys Ala Ala Lys Leu Phe Arg
65          70          75          80
Gly Arg Phe Ser Leu Phe Trp Trp Thr Val Val
          85          90

<210> 3123
<211> 344
<212> DNA
<213> Homo sapiens

<400> 3123
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gagattatga ggagcccgca agagatgaaa aaccgatca gtaacaagaa gaggaagaaa
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gcagcccagg tgaccttcag aaagacattg gagaaggaag caaagggaga ggagcccagc
180
atcgcagtc ccaagttcaa acagaggaag ggggagtccg acggggccta tatccaccgc
240

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atgcagcaag aggcccgca tgtgctgttc ctacagcaaga accaggccat ccggcagcca
 300
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 344

<210> 3124
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 3124
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 20 25 30
 Lys Gly Glu Glu Pro Asp Ile Ala Val Pro Lys Phe Lys Lys Arg Lys
 35 40 45
 Gly Glu Ser Asp Gly Ala Tyr Ile His Arg Met Gln Gln Glu Ala Gln
 50 55 60
 His Val Leu Phe Leu Ser Lys Asn Gln Ala Ile Arg Gln Pro Glu Val
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 Gln Ala Ala Pro Lys Glu Lys Ser Glu Gln Lys Lys
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<210> 3125
 <211> 647
 <212> DNA
 <213> Homo sapiens

<400> 3125
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 ggtcagcagg cagtttagtt gtgggagtat ttccaatttg catgaatgaa acatggacaa
 180
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 240
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 420
 aaacctctt cctgtgttct ctgccaagag agctggagca aaagagatga gtttgagact
 480
 ctgattcatc catcaagaca aataaactca gtctatggag gttagcaggg caatttgtga
 540
 agcaacaaa agttgagttt tggaaagggg ctctgaagaa aatgaagatg acataccagg
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<210> 3126

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3126

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 20             25             30
His Arg Leu Ser Leu Phe Val Leu Met Asp Glu Ser Glu Ser Gln Thr
 35             40             45
His Leu Phe Cys Ser Ser Ser Leu Gly Arg Glu His Arg Lys Met Gly
 50             55             60
Phe Ala Tyr Val Cys Val Trp Gly Gly Leu Phe Phe Leu Cys Phe Ser
 65             70             75             80
Val Leu Ala Ile Ala Cys Gly Arg Ala Gly Thr Trp Asp Leu Ala Arg
 85             90             95
Leu Leu Ala Trp Ala Glu Ala Thr Trp Gly Val Leu Pro Ser Thr Phe
100             105             110
Cys Asp Val Pro
115

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<210> 3127

<211> 2218

<212> DNA

<213> Homo sapiens

<400> 3127

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120
actttggaga aattgaagag cctagggcct tttgggtgc aagtcacaga agaataatgg
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240
tccatcactg tgacctggc agcgaccag gctattggcc tcaaggggat catcttggct
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ggcactgagg agcagaaagc caaatacttg cctaaactgg cgtccgggga gcacatagca
360
gccttctgcc tcacggagcc agccagtggg agcgatgcag cctcaatccg gagcagagcc
420
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<210> 3128

<211> 565

<212> PRT

<213> Homo sapiens

<400> 3128

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 Ser Asn Thr Met Tyr Ser Arg Leu Gly Glu Ile Ile Ser Met Asp Gly
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 Ile Ile Leu Ala Gly Thr Glu Glu Gln Lys Ala Lys Tyr Leu Pro Lys
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<210> 3129

<211> 1964

<212> DNA

<213> Homo sapiens

<400> 3129

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<210> 3130

<211> 273

<212> PRT

<213> Homo sapiens

<400> 3130

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			20					25				30			
Gly	Pro	Gly	Ala	Ala	Gln	Glu	Pro	Thr	Trp	Leu	Thr	Asp	Val	Pro	Ala
			35					40				45			
Ala	Met	Glu	Phe	Ile	Ala	Ala	Thr	Glu	Val	Ala	Val	Ile	Gly	Phe	Phe
			50					55				60			
Gln	Asp	Leu	Glu	Ile	Pro	Ala	Val	Pro	Ile	Leu	His	Ser	Met	Val	Gln

65		70		75		80									
Lys	Phe	Pro	Gly	Val	Ser	Phe	Gly	Ile	Ser	Thr	Asp	Ser	Glu	Val	Leu
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Thr	His	Tyr	Asn	Ile	Thr	Gly	Asn	Thr	Ile	Cys	Leu	Phe	Arg	Leu	Val
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Asp	Asn	Glu	Gln	Leu	Asn	Leu	Glu	Asp	Glu	Asp	Ile	Glu	Ser	Ile	Asp
			115					120					125		
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			130					135					140		
Thr	Glu	Tyr	Asn	Pro	Val	Thr	Val	Ile	Gly	Leu	Phe	Asn	Ser	Val	Ile
			145					150					155		160
Gln	Ile	His	Leu	Leu	Leu	Ile	Met	Asn	Lys	Ala	Ser	Pro	Glu	Tyr	Glu
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Glu	Asn	Met	His	Arg	Tyr	Gln	Lys	Ala	Ala	Lys	Leu	Phe	Gln	Gly	Lys
			180						185					190	
Ile	Leu	Phe	Ile	Leu	Val	Asp	Ser	Gly	Met	Lys	Glu	Asn	Gly	Lys	Val
			195					200					205		
Ile	Ser	Phe	Phe	Lys	Leu	Lys	Glu	Ser	Gln	Leu	Pro	Ala	Leu	Ala	Ile
			210					215					220		
Tyr	Gln	Thr	Leu	Asp	Asp	Glu	Trp	Asp	Thr	Leu	Pro	Thr	Ala	Glu	Val
			225					230					235		240
Ser	Val	Glu	His	Val	Gln	Asn	Phe	Cys	Asp	Gly	Phe	Leu	Ser	Gly	Lys
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<210> 3131

<211> 1544

<212> DNA

<213> Homo sapiens

<400> 3131

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<211> 283

<212> PRT

<213> Homo sapiens

<400> 3132

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Gly	Ser	Thr	Gly	Thr	Ala	Glu	Gly	Gly	Asn	Met	Ser	Arg	Leu	Ser	Leu
			20					25					30		
Thr	Arg	Ser	Pro	Val	Ser	Pro	Leu	Ala	Ala	Gln	Gly	Ile	Pro	Leu	Pro
			35				40					45			
Ala	Gln	Leu	Thr	Lys	Ser	Asn	Ala	Pro	Val	His	Ile	Asp	Val	Gly	Gly
			50			55					60				
His	Met	Tyr	Thr	Ser	Ser	Leu	Ala	Thr	Leu	Thr	Lys	Tyr	Pro	Glu	Ser
			65			70				75				80	
Arg	Ile	Gly	Arg	Leu	Phe	Asp	Gly	Thr	Glu	Pro	Ile	Val	Leu	Asp	Ser
			85					90					95		
Leu	Lys	Gln	His	Tyr	Phe	Ile	Asp	Arg	Asp	Gly	Gln	Met	Phe	Arg	Tyr
			100				105						110		
Ile	Leu	Asn	Phe	Leu	Arg	Thr	Ser	Lys	Leu	Leu	Ile	Pro	Asp	Asp	Phe

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  145              150              155              160
Arg Phe Ser Arg Pro Cys Glu Cys Leu Val Val Arg Val Ala Pro Asp
      165              170              175
Leu Gly Glu Arg Ile Thr Leu Ser Gly Asp Lys Ser Leu Ile Glu Glu
      180              185              190
Val Phe Pro Glu Ile Gly Asp Val Met Cys Asn Ser Val Asn Ala Gly
      195              200              205
Trp Asn His Asp Ser Thr His Val Ile Arg Phe Pro Leu Asn Gly Tyr
      210              215              220
Cys His Leu Asn Ser Val Gln Val Leu Glu Arg Leu Gln Gln Arg Gly
  225              230              235              240
Phe Glu Ile Val Gly Ser Cys Gly Gly Gly Val Asp Ser Ser Gln Phe
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<210> 3133

<211> 621

<212> DNA

<213> Homo sapiens

<400> 3133

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<210> 3134

<211> 51

<212> PRT

<213> Homo sapiens

<400> 3134

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<212> DNA

<213> Homo sapiens

<400> 3135

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<212> PRT

<213> Homo sapiens

<400> 3138

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Glu Leu Ile Lys Ile Phe	Leu Leu Glu Cys Asn Val Arg Glu Val Arg				
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Pro Leu His Glu Glu Val	Glu Ala Leu Leu Phe Met Ser Glu Gly Lys				
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<212> DNA

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<213> Homo sapiens

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<210> 3144

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<211> 81
 <212> PRT
 <213> Homo sapiens

<400> 3144
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 35 40 45
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 <212> DNA
 <213> Homo sapiens

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<210> 3146
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<400> 3146
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 35 40 45
 Arg Leu Pro Pro Phe Thr His Leu Pro Ser Val Pro Gly Pro Pro Ser

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Gln Met Thr Ser Gly Gly Glu Pro His Ile Ser Thr Gly Ser Arg Arg				
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Pro Arg Lys Leu Pro Trp Pro Ala His Pro Arg Cys Ser Ala Cys Pro				
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<210> 3147

<211> 3106

<212> DNA

<213> Homo sapiens

<400> 3147

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<210> 3148

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3148

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Leu	Phe Leu Asn Phe	Ile Arg Phe Leu	Glu Ser His Trp	Phe Val Trp	
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Val	Thr Gln Met Asn	His Ile Val Met	Glu Ile Asp Gln	Glu Ala Tyr	
		340		345	350
Arg	Asp Trp Phe Ser	Ser Gln Leu Thr	Ala Thr Cys Asn	Val Glu Gln	
		355		360	365
Ser	Phe Phe Asn Asp	Trp Phe Ser Gly	His Leu Asn Phe	Gln Ile Glu	
		370		375	380
His	His Leu Phe Pro	Thr Met Pro Arg	His Asn Leu His	Lys Ile Ala	
		385		390	395
Pro	Leu Val Lys Ser	Leu Cys Ala Lys	His Gly Ile Glu	Tyr Gln Glu	
		405		410	415
Lys	Pro Leu Leu Arg	Ala Leu Leu Asp	Ile Ile Arg Ser	Leu Lys Lys	
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<210> 3149

<211> 1006

<212> DNA

<213> Homo sapiens

<400> 3149

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<210> 3150

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3150

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<212> DNA

<213> Homo sapiens

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<210> 3152

<211> 214

<212> PRT

<213> Homo sapiens

<400> 3152

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 35 40 45
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 Val Gly Pro Pro Glu Gln Ala Val Gln Met Leu Gly Glu Ala Leu Pro
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<210> 3153

<211> 1498

<212> DNA

<213> Homo sapiens

<400> 3153

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ctgcggaggc agaggccaca ggctctcggg acaatgggct cccgcctctc ccgcgggtcc
1380
agccatcacc tgtgggtcca aagcgaagag ttggggcgct ggacgcggcg aggcctgccc
1440
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1498

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<210> 3154

<211> 65

<212> PRT

<213> Homo sapiens

<400> 3154

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Thr Asp Thr Ala Pro Trp Ala Ala Leu Pro Val Gly His Leu Ser Leu
1           5           10           15
Cys Pro Gly Ala Gly Ile Ala Ser Arg Arg Pro Arg Gln Gln Gly Asp
           20           25           30
Ser Gly His Arg Trp Gly Ile Thr Leu Pro Thr Arg Asp Ser Arg His
           35           40           45
Gly Leu Leu Gly Leu Gln Ala Pro Trp Gly Ser Arg Gly Lys Pro Gln
50           55           60
Gly
65

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<210> 3155

<211> 551

<212> DNA

<213> Homo sapiens

<400> 3155

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gcagtgctct ctgctaagaa accaaagcta gccctggaag attcggaata cactgcctct
120
actaactgtg actcttcttc agaaggactg gaaaaggaca cagcaacaca gagaagtgc
180
cagacttgcc tagaaccatc atgttcattg tcttctgaaa atcaggaatg ccagactgct
240
gccagccctg gggaaattct ggaattttg aagaaaggga aggcatttgt tttagatatt
300
gacttggatt ttttttcagt caagaatccc ttcaaaaaaa tgttcactca ggaagagtac
360
aaaatcttac aagagctgta ccaatttaag aaacctggca ccaacctaac agaggaagat
420
ttggtagata ttgttgatc tcgaattcat caattagagg atttagaagc cactttcgct
480
gatttgtgtg atggtgatga tgaagaaacg gtacagggat gggcttcaaa ccctggaatg
540
gaatcactag t
551

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<210> 3156

<211> 178

<212> PRT

<213> Homo sapiens

<400> 3156

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Met Val Lys Pro Tyr Lys Leu Cys Asn Asn Gln Glu Glu Asn Asp Ala
1           5           10           15
Val Ser Ser Ala Lys Lys Pro Lys Leu Ala Leu Glu Asp Ser Glu Asn
           20           25           30
Thr Ala Ser Thr Asn Cys Asp Ser Ser Ser Glu Gly Leu Glu Lys Asp
           35           40           45
Thr Ala Thr Gln Arg Ser Asp Gln Thr Cys Leu Glu Pro Ser Cys Ser

```

50		55		60
Cys Ser Ser Glu Asn Gln Glu Cys Gln Thr Ala Ala Ser Pro Gly Glu				
65	70	75	80	
Ile Leu Glu Ile Leu Lys Lys Gly Lys Ala Phe Val Leu Asp Ile Asp				
85	90	95		
Leu Asp Phe Phe Ser Val Lys Asn Pro Phe Lys Lys Met Phe Thr Gln				
100	105	110		
Glu Glu Tyr Lys Ile Leu Gln Glu Leu Tyr Gln Phe Lys Lys Pro Gly				
115	120	125		
Thr Asn Leu Thr Glu Glu Asp Leu Val Asp Ile Val Asp Thr Arg Ile				
130	135	140		
His Gln Leu Glu Asp Leu Glu Ala Thr Phe Ala Asp Leu Cys Asp Gly				
145	150	155	160	
Asp Asp Glu Glu Thr Val Gln Gly Trp Ala Ser Asn Pro Gly Met Glu				
165	170	175		

Ser Leu

<210> 3157

<211> 903

<212> DNA

<213> Homo sapiens

<400> 3157

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120
tctctggtag gacttctgat ggtgggggga cctccccagg tcacagtcca ggtgcagggc
180
caggaggtcc tatcagagaa gatggagccc tccagtttcc agccccctacc tgaaactgag
240
cctccaactc cagagcctgg gcccaagaca cctcctagga ctatgcagga atcaccactg
300
ggcctgcagg tgaagagga gtcagaggtt acagaggact cagatttctt ggagtctggg
360
cctctagctg ccaccagga gtctgtaccc acctcctgct ctgaggaggc ccagtaccaa
420
ctgtgatttc agagatgttg gaccgtgctg gaccagatct tccccacag caagactggg
480
cctgagggtc cctcatggag ggagcacccc agggccctgt ggcgatagga agctgggggc
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600
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660
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720
gaacaggacc ccacggacga ggatccctgc cggggtgttg gccctgctct ggtcaccacc
780
cgctggcgct cccccagggg ccggagccgg ggcgcgcaca gactgggggg cggggtggtt
840
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900

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cac
903

<210> 3158
<211> 92
<212> PRT
<213> Homo sapiens

<400> 3158
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1 5 10 15
Val Leu Ser Glu Lys Met Glu Pro Ser Ser Phe Gln Pro Leu Pro Glu
20 25 30
Thr Glu Pro Pro Thr Pro Glu Pro Gly Pro Lys Thr Pro Pro Arg Thr
35 40 45
Met Gln Glu Ser Pro Leu Gly Leu Gln Val Lys Glu Glu Ser Glu Val
50 55 60
Thr Glu Asp Ser Asp Phe Leu Glu Ser Gly Pro Leu Ala Ala Thr Gln
65 70 75 80
Glu Ser Val Pro Thr Leu Leu Pro Glu Glu Ala Gln
85 90

<210> 3159
<211> 2408
<212> DNA
<213> Homo sapiens

<400> 3159
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120
ccctggcaga ctaacgaagc agctcccttc ccaccccaac tgcagggtcta attttgagc
180
ctttgcctgc catttcttcc aggttgaggg agccgcagag gcggaggctc gcgtattctc
240
gcagtcagca ccacgtcgc ccccggaagc tcggtgtctca ggcctctcgc gagcggggct
300
ctccgtctgc ggtcccttgt gaaggctctg ggcgggtgca gaggccggcc gtccggtttg
360
gctcacctct cccaggaaac ttcacactgg agagccaaaa ggagtggag agcctgtctt
420
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480
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540
gccactttat tggagaaact tttggaaaaa tacatggatg aggatgggtga gtgggtggata
600
gccaaacaac gagggaaaag ggccatcaca gacaatgaca tgcagagtat tttggacctt
660
cataataaat tacgaagtca ggtgtatcca acagcctcta atatggagta tatgacatgg
720
gatgtagagc tggaaagatc tgcagaatcc tgggctgaaa gttgcttgtg ggaacatgga
780

cctgcaagct tgcttccatc aattggacag aatttgggag cacactgggg aagatatagg
840
cccccgagct ttcattgtaca atcgtggtat gatgaagtga aagacttttag ctaccccatat
900
gaacatgaat gcaaccata ttgtccattc aggtgttctg gccctgtatg tacacattat
960
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1020
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1080
aagggaaact ggtggggcca tgccccttac aaacatgggc ggcctgttct tgcttgccca
1140
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1200
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1260
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1320
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1380
aatagggtacg aatgtcctgc tggctgtttg gatagtaaag ctaaagtatt tggcagtgta
1440
cattatgaaa tgcaatccag catctgtaga gctgcaattc attatgggtat aatagacaat
1500
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1560
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1680
ctgcttcaca ttgcccaga gtatactgtc ctgttaactg tatgcaagca aatccacatt
1740
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1800
tacatgtcgg gagtagttcg aaatcacggt gggtatgttg atgtaatgcc tgtggacca
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1980
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2040
tacagagtac atcaactatt ttcagcccaa aaaggtgcc aatgcatata aatcttgata
2100
aacaagtct ataaaataaa acatgggaca ttgacttttg gaaaagtaat gaaaatataa
2160
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2220
aattacatag tcatgattgt tctacgttct atattattata tgggtgcttg tatatgccac
2280
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2340
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2400

tgccatta
2408

<210> 3160
<211> 431
<212> PRT
<213> Homo sapiens

<400> 3160

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Met Lys Cys Thr Ala Arg Glu Trp Leu Arg Val Thr Thr Val Leu Phe
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Met Ala Arg Ala Ile Pro Ala Met Val Val Pro Asn Ala Thr Leu Leu
          20          25          30
Glu Lys Leu Leu Glu Lys Tyr Met Asp Glu Asp Gly Glu Trp Trp Ile
          35          40          45
Ala Lys Gln Arg Gly Lys Arg Ala Ile Thr Asp Asn Asp Met Gln Ser
          50          55          60
Ile Leu Asp Leu His Asn Lys Leu Arg Ser Gln Val Tyr Pro Thr Ala
65          70          75          80
Ser Asn Met Glu Tyr Met Thr Trp Asp Val Glu Leu Glu Arg Ser Ala
          85          90          95
Glu Ser Trp Ala Glu Ser Cys Leu Trp Glu His Gly Pro Ala Ser Leu
          100          105          110
Leu Pro Ser Ile Gly Gln Asn Leu Gly Ala His Trp Gly Arg Tyr Arg
          115          120          125
Pro Pro Thr Phe His Val Gln Ser Trp Tyr Asp Glu Val Lys Asp Phe
          130          135          140
Ser Tyr Pro Tyr Glu His Glu Cys Asn Pro Tyr Cys Pro Phe Arg Cys
145          150          155          160
Ser Gly Pro Val Cys Thr His Tyr Thr Gln Val Val Trp Ala Thr Ser
          165          170          175
Asn Arg Ile Gly Cys Ala Ile Asn Leu Cys His Asn Met Asn Ile Trp
          180          185          190
Gly Gln Ile Trp Pro Lys Ala Val Tyr Leu Val Cys Asn Tyr Ser Pro
          195          200          205
Lys Gly Asn Trp Trp Gly His Ala Pro Tyr Lys His Gly Arg Pro Cys
210          215          220
Ser Ala Cys Pro Pro Ser Phe Gly Gly Gly Cys Arg Glu Asn Leu Cys
225          230          235          240
Tyr Lys Glu Gly Ser Asp Arg Tyr Tyr Pro Pro Arg Glu Glu Glu Thr
          245          250          255
Asn Glu Ile Glu Arg Gln Gln Ser Gln Val His Asp Thr His Val Arg
          260          265          270
Thr Arg Ser Asp Asp Ser Ser Arg Asn Glu Val Ile Ser Ala Gln Gln
          275          280          285
Met Ser Gln Ile Val Ser Cys Glu Val Arg Leu Arg Asp Gln Cys Lys
          290          295          300
Gly Thr Thr Cys Asn Arg Tyr Glu Cys Pro Ala Gly Cys Leu Asp Ser
305          310          315          320
Lys Ala Lys Val Ile Gly Ser Val His Tyr Glu Met Gln Ser Ser Ile
          325          330          335
Cys Arg Ala Ala Ile His Tyr Gly Ile Ile Asp Asn Asp Gly Gly Trp
          340          345          350
Val Asp Ile Thr Arg Gln Gly Arg Lys His Tyr Phe Ile Lys Ser Asn

```

355	360	365
Arg Asn Gly Ile Gln Thr	Ile Gly Lys Tyr Gln Ser Ala Asn Ser Phe	
370	375	380
Thr Val Ser Lys Val Thr	Val Gln Ala Val Thr Cys Glu Thr Thr Val	
385	390	395
Asp Ser Ser Val His Phe	Ile Ser Leu Leu His Ile Ala Gln Glu Tyr	400
405	410	415
Thr Val Leu Val Thr Val	Cys Lys Gln Ile His Ile Met Leu Val	
420	425	430

<210> 3161

<211> 1197

<212> DNA

<213> Homo sapiens

<400> 3161

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120
ctcaacttgc taaaaatcaa gcatggcgat ttgttgttcc tgtttccctc gagccttgct
180
gggccctcat ctgaaatgga gacgtcagtt ccaccgggct tcaaagtctt tggcgctccc
240
aacgtggtgg aggatgagat tgatcagtag ctacgcaaac aggacgggaa gatttacaga
300
agcccgagac cacagctatg ccgccacggc cctttgggga aatgcgtgca ctgcgtccct
360
ctagagccat tcgatgagga ctatctaacc catctcgagc ctcccgtaga gcacatgtcc
420
ttccacgcct acatccggaa gctgactgga ggggctgaca aggggaagtt tgttgccctg
480
gagaacatca gctgcaagat taagtcaggg tcgagggggc acctcccctg gccgaatggc
540
atctgtacta agtgccagcc gagcgccatc acgctgaaca gacagaagta caggcatgtg
600
gacaatatca tgtttgagaa tcacaccgtc gctgaccgct ttcttgactt ctgggaaaag
660
acagggaacc agcatttttg gtacttatac ggacggtaca cggagcacaa agacattccc
720
cttggcacat gggctgaagt ggctgcgatt tatgagccac ctacagattg tacacagaac
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840
ggcctgcgga aggttggtct gatatttaca gacctcgtct cagaagatac ccgaaagggg
900
accgtccgct acagtcgaaa taaggacacc tatttcttaa gttcagaaga gtgcatcact
960
gcaggagact tccagaacaa gcattcccaac atgtgccggc tctctccaga cggacatttt
1020
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1080
gggtaccagg tgtccaatca gtgtatggca ctggtccctg atgagtgttt gctgccatgc
1140

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aaggacgccc cggatgctg acgccaagga gtctagcagt gagcagtaacg tgccaaa
1197

<210> 3162

<211> 386

<212> PRT

<213> Homo sapiens

<400> 3162

Xaa	Thr	Pro	Ala	Lys	Phe	Leu	Lys	Lys	Val	Ala	Lys	Glu	Phe	Gly	Phe
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Gln	Asn	Asn	Gly	Phe	Ser	Val	Asn	Ile	Asn	Arg	Asn	Lys	Thr	Gly	Glu
			20					25					30		
Ile	Thr	Ala	Ser	Ser	Asn	Lys	Ser	Leu	Asn	Leu	Leu	Lys	Ile	Lys	His
		35				40					45				
Gly	Asp	Leu	Leu	Phe	Leu	Phe	Pro	Ser	Ser	Leu	Ala	Gly	Pro	Ser	Ser
	50					55					60				
Glu	Met	Glu	Thr	Ser	Val	Pro	Pro	Gly	Phe	Lys	Val	Phe	Gly	Ala	Pro
65					70					75				80	
Asn	Val	Val	Glu	Asp	Glu	Ile	Asp	Gln	Tyr	Leu	Ser	Lys	Gln	Asp	Gly
				85					90					95	
Lys	Ile	Tyr	Arg	Ser	Arg	Asp	Pro	Gln	Leu	Cys	Arg	His	Gly	Pro	Leu
			100				105						110		
Gly	Lys	Cys	Val	His	Cys	Val	Pro	Leu	Glu	Pro	Phe	Asp	Glu	Asp	Tyr
			115				120					125			
Leu	Asn	His	Leu	Glu	Pro	Pro	Val	Lys	His	Met	Ser	Phe	His	Ala	Tyr
			130			135					140				
Ile	Arg	Lys	Leu	Thr	Gly	Gly	Ala	Asp	Lys	Gly	Lys	Phe	Val	Ala	Leu
145					150					155				160	
Glu	Asn	Ile	Ser	Cys	Lys	Ile	Lys	Ser	Gly	Cys	Glu	Gly	His	Leu	Pro
				165					170					175	
Trp	Pro	Asn	Gly	Ile	Cys	Thr	Lys	Cys	Gln	Pro	Ser	Ala	Ile	Thr	Leu
			180					185					190		
Asn	Arg	Gln	Lys	Tyr	Arg	His	Val	Asp	Asn	Ile	Met	Phe	Glu	Asn	His
			195				200					205			
Thr	Val	Ala	Asp	Arg	Phe	Leu	Asp	Phe	Trp	Arg	Lys	Thr	Gly	Asn	Gln
		210				215					220				
His	Phe	Gly	Tyr	Leu	Tyr	Gly	Arg	Tyr	Thr	Glu	His	Lys	Asp	Ile	Pro
225				230						235				240	
Leu	Gly	Ile	Arg	Ala	Glu	Val	Ala	Ala	Ile	Tyr	Glu	Pro	Pro	Gln	Ile
				245					250					255	
Gly	Thr	Gln	Asn	Ser	Leu	Glu	Leu	Leu	Glu	Asp	Pro	Lys	Ala	Glu	Val
		260					265						270		
Val	Asp	Glu	Ile	Ala	Ala	Lys	Leu	Gly	Leu	Arg	Lys	Val	Gly	Trp	Ile
		275					280					285			
Phe	Thr	Asp	Leu	Val	Ser	Glu	Asp	Thr	Arg	Lys	Gly	Thr	Val	Arg	Tyr
		290				295					300				
Ser	Arg	Asn	Lys	Asp	Thr	Tyr	Phe	Leu	Ser	Ser	Glu	Glu	Cys	Ile	Thr
305					310					315				320	
Ala	Gly	Asp	Phe	Gln	Asn	Lys	His	Pro	Asn	Met	Cys	Arg	Leu	Ser	Pro
				325					330					335	
Asp	Gly	His	Phe	Gly	Ser	Lys	Phe	Val	Thr	Ala	Val	Ala	Thr	Gly	Gly
		340					345						350		
Pro	Asp	Asn	Gln	Val	His	Phe	Glu	Gly	Tyr	Gln	Val	Ser	Asn	Gln	Cys

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Met Ala Leu Val Arg Asp Glu Cys Leu Leu Pro Cys Lys Asp Ala Pro
      370                      375                      380
Val Cys
385

<210> 3163
<211> 1075
<212> DNA
<213> Homo sapiens

<400> 3163
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120
tgggggctac cagtggaccc actgactcct ggacatcagg atgctctgcc atggcaaaag
180
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240
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420
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480
tcagcaaaagg gcagctggaa ggcaaaagcgg tcggtgcggc cgcgctcgtc gggcgagagg
540
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600
gttctctccc ctctgcccc cgcggggctg cgcgggacgt agcgcgctgg gtggtcgcaa
660
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720
gcacgcgtac caacccgcgc agcaccggcg gcgggccccc aggcacccac accccggcac
780
ccccggggac cgtccggga ggccggcaga gcgctccag ctccaccatg acgcgcccc
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900
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960
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1020
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1075

<210> 3164
<211> 94
<212> PRT
<213> Homo sapiens

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<400> 3164

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His Gln Asp Ala Leu Pro Trp Gln Arg Cys Tyr His Pro Cys Ser Ser
 20           25           30
Ser Ser Val Pro Pro Arg Gln Ala Cys Ala Ser Pro Ala Ser Cys Ser
 35           40           45
Ser Ser Ala Ala Xaa Ala Ser Ala Ser Thr Gly Pro Trp His Ser Gly
 50           55           60
Cys Gly Ser Ser Cys Gly Ser Cys Cys Cys Trp Gly Ser Pro Ser Ala
 65           70           75           80
Ser Val Gly Val Gly Ala Gly Ala Ile Arg Ser Arg Thr Val
 85           90

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<210> 3165

<211> 2413

<212> DNA

<213> Homo sapiens

<400> 3165

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120
ggaaagtgcg ttaaagggaa agggtcgttg ccactctcgg ccacggcat cgtggtcgcc
180
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240
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420
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660
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720
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900
gagaaattta ggtatttacc taaggccatt aaggcgtgga ataaccgcgc cccacgtgta
960
gaatgtgtcc tggcagagct caagggcgtt acatgcgaga acagggaggc tgtgctggat
1020

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 1080
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 1140
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 1200
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 1260
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 1320
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<213> Homo sapiens

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225          230          235          240
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His	Gly	Ala	Ser	Leu	Ser	Ala	Arg	Thr	Ser	Met	Asp	Glu	Met	Pro	Ile
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Asp	Leu	Cys	Glu	Glu	Glu	Glu	Phe	Lys	Val	Leu	Leu	Leu	Glu	Leu	Lys
145			150					155						160	
His	Lys	His	Asp	Val	Ile	Met	Lys	Ser	Gln	Leu	Arg	His	Lys	Ser	Ser
			165					170					175		
Leu	Ser	Arg	Arg	Thr	Ser	Ser	Ala	Gly	Ser	Arg	Gly	Lys	Val	Val	Arg
	180						185						190		
Arg	Ala	Ser	Leu	Ser	Asp	Arg	Thr	Asn	Leu	Tyr	Arg	Lys	Glu	Tyr	Glu
	195					200						205			
Gly	Glu	Ala	Ile	Leu	Trp	Gln	Arg	Ser	Ala	Ala	Glu	Asp	Gln	Arg	Thr
	210					215					220				
Ser	Thr	Tyr	Asn	Gly	Asp	Ile	Arg	Glu	Thr	Arg	Thr	Asp	Gln	Glu	Asn
225				230				235						240	
Lys	Asp	Pro	Asn	Pro	Arg	Leu	Glu	Lys	Pro	Val	Leu	Leu	Ser	Glu	Phe
			245					250					255		
Pro	Thr	Lys	Ile	Pro	Arg	Gly	Glu	Leu	Asp	Met	Pro	Val	Glu	Asn	Gly
	260					265							270		
Leu	Arg	Ala	Pro	Val	Ser	Ala	Tyr	Gln	Tyr	Ala	Leu	Ala	Asn	Gly	Asp

275	280	285
Val Trp Lys Val His Glu Val Pro Asp Tyr Ser Met Ala Tyr Gly Asn		
290	295	300
Pro Gly Val Ala Asp Ala Thr Pro Pro Trp Ser Ser Tyr Lys Glu Gln		
305	310	315
Ser Pro Gln Thr Leu Leu Glu Leu Lys Arg Gln Arg Ala Ala Ala Lys		
325	330	335
Leu Leu Ser His Pro Phe Leu Ser Thr His Leu Gly Ser Ser Met Ala		
340	345	350
Arg Thr Gly Glu Ser Ser Ser Glu Gly Lys Ala Xaa Leu Ile Gly Gly		
355	360	365
Arg Thr Ser Pro Tyr Ser Ser Asn Gly Thr Ser Val Tyr Tyr Thr Val		
370	375	380
Thr Ser Gly Asp Pro Pro Leu Leu Lys Phe Lys Ala Pro Ile Glu Glu		
385	390	395
Met Glu Glu Lys Val His Gly Cys Cys Arg Ile Ser		400
405	410	

<210> 3171

<211> 753

<212> DNA

<213> Homo sapiens

<400> 3171

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 120
 ttctccctta cagggtcaac ggactgcgtg tggtactcca ccgtgggcac cagcgacgca
 180
 gaaacctcgg cgctgcatat cggtgttggg gactcgtcgg ccatggatgt gtcctcagtc
 240
 caccacaaca gcacactcct tcgctactcc gtgtccctgc tgggctacgg cttctacggg
 300
 gacatcatca aggacagtga gaagaaacgg tgggtgggtc ttgccagata cgacttttca
 360
 ggttttaaga ccttcctctc ccaccactgc tatgaaggga cagtgtcctt cctccctgca
 420
 caacacacgg tgggatctcc aagggatagg aagccctgcc gggcaggatg ctttgtttgc
 480
 agggcaagca agcagcagct ggaggaggag cagaagaaag cactgtatgg tttggaagct
 540
 gcggaggatg tggaggagtg gcaagtcgtc tgtgggaagt ttctggccat caatgccaca
 600
 aacatgtcct gtgctgtcgc ccggagcccc aggggcctct ccccgctgct ccacttggga
 660
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 753

<210> 3172

<211> 228

<212> PRT

<213> Homo sapiens

<400> 3172

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20      25      30
Gly Thr Ser Asp Ala Glu Thr Ser Ala Leu His Ile Val Val Gly Asp
35      40      45
Ser Leu Ala Met Asp Val Ser Ser Val His His Asn Ser Thr Leu Leu
50      55      60
Arg Tyr Ser Val Ser Leu Leu Gly Tyr Gly Phe Tyr Gly Asp Ile Ile
65      70      75      80
Lys Asp Ser Glu Lys Lys Arg Trp Leu Gly Leu Ala Arg Tyr Asp Phe
85      90      95
Ser Gly Leu Lys Thr Phe Leu Ser His His Cys Tyr Glu Gly Thr Val
100     105     110
Ser Phe Leu Pro Ala Gln His Thr Val Gly Ser Pro Arg Asp Arg Lys
115     120     125
Pro Cys Arg Ala Gly Cys Phe Val Cys Arg Gln Ser Lys Gln Gln Leu
130     135     140
Glu Glu Glu Gln Lys Lys Ala Leu Tyr Gly Leu Glu Ala Ala Glu Asp
145     150     155     160
Val Glu Glu Trp Gln Val Val Cys Gly Lys Phe Leu Ala Ile Asn Ala
165     170     175
Thr Asn Met Ser Cys Ala Cys Arg Arg Ser Pro Arg Gly Leu Ser Pro
180     185     190
Ala Ala His Leu Gly Asp Gly Ser Ser Asp Leu Ile Leu Ile Arg Lys
195     200     205
Cys Ser Arg Phe Asn Phe Leu Arg Phe Leu Ile Trp His Glu Val Cys
210     215     220
Lys Lys Pro Leu
225

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<210> 3173

<211> 573

<212> DNA

<213> Homo sapiens

<400> 3173

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120
tatagtgaag gtttgaagggt tgaagtgact cattgtggaa caatgagacg gaaataccgt
180
gtttgtaatg taacaaggag gcctgccagt catcaaacct ttcctttaca gttagaaaaa
240
ggccaaactg tggagagaac agtagcgtag tatttcagag aaaagtatac tcttcagctg
300
aagtaccgcg accttccctg tctgcaagtc gggcaggaac agaaacacac ctacctgcga
360
ctagaagtct gtaatatgtt ggcagggcaa cgatgtatca agaagctaac agacaatcag
420

```

acttccacta tgatcaaggc aacagcaaga tctgcaccag atagacaaga ggaaattagc
 480
 agattggttaa gaagtgcataa ttatgaaaca gatccatttg ttcaggaggt tcaattttaa
 540
 gttcgggatg aaatgggtca tgtaactgga cgc
 573

<210> 3174
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 3174
 Cys Tyr Ser Glu Gly Leu Lys Val Glu Val Thr His Cys Gly Thr Met
 1 5 10 15
 Arg Arg Lys Tyr Arg Val Cys Asn Val Thr Arg Arg Pro Ala Ser His
 20 25 30
 Gln Thr Phe Pro Leu Gln Leu Glu Asn Gly Gln Thr Val Glu Arg Thr
 35 40 45
 Val Ala Gln Tyr Phe Arg Glu Lys Tyr Thr Leu Gln Leu Lys Tyr Pro
 50 55 60
 His Leu Pro Cys Leu Gln Val Gly Gln Glu Gln Lys His Thr Tyr Leu
 65 70 75 80
 Pro Leu Glu Val Cys Asn Ile Val Ala Gly Gln Arg Cys Ile Lys Lys
 85 90 95
 Leu Thr Asp Asn Gln Thr Ser Thr Met Ile Lys Ala Thr Ala Arg Ser
 100 105 110
 Ala Pro Asp Arg Gln Glu Glu Ile Ser Arg Leu Val Arg Ser Ala Asn
 115 120 125
 Tyr Glu Thr Asp Pro Phe Val Gln Glu Phe Gln Phe Lys Val Arg Asp
 130 135 140
 Glu Met Ala His Val Thr Gly Arg
 145 150

<210> 3175
 <211> 948
 <212> DNA
 <213> Homo sapiens

<400> 3175
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 120
 tgggctccgg aatcgcccg gcgcgggtact gcgggaccca ctgcggatat ggctgtcttg
 180
 gctggatccc tgttgggccc cagcagtagg tcggcagcgt tgctgggtgg caggtggctc
 240
 cagccccggg cctggctggg gttcccagac gcctggggcc tccccacccc gcagcaggcc
 300
 cggggcaagg ctgcgggaa tgagtatcag ccgagcaaca tcaaacgcaa gaacaagcac
 360
 ggctgggtcc gcgcctgag cagcggggcc ggcgtgcagg tcattccttc ccgaatgctc
 420

aagggccgca agtcgctgag ccattgagga tcgcgacgca gtcggcggga cccatcgga
 480
 agcatcgccc tcgcctcgga ccttgccctgg cgctattttt gcaggaggct ggggagcagg
 540
 aacgcctcgg acctgagtg ctcctcatatt gtgggggttga agtctggatg ggagcttgcc
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 720
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 780
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 840
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 900
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 948

<210> 3176

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3176

Met	Ala	Val	Leu	Ala	Gly	Ser	Leu	Leu	Gly	Pro	Thr	Ser	Arg	Ser	Ala
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Ala	Leu	Leu	Gly	Gly	Arg	Trp	Leu	Gln	Pro	Arg	Ala	Trp	Leu	Gly	Phe
			20				25						30		
Pro	Asp	Ala	Trp	Gly	Leu	Pro	Thr	Pro	Gln	Gln	Ala	Arg	Gly	Lys	Ala
		35				40					45				
Arg	Gly	Asn	Glu	Tyr	Gln	Pro	Ser	Asn	Ile	Lys	Arg	Lys	Asn	Lys	His
	50				55					60					
Gly	Trp	Val	Arg	Arg	Leu	Ser	Thr	Pro	Ala	Gly	Val	Gln	Val	Ile	Leu
65					70				75					80	
Arg	Arg	Met	Leu	Lys	Gly	Arg	Lys	Ser	Leu	Ser	His				
			85						90						

<210> 3177

<211> 1857

<212> DNA

<213> Homo sapiens

<400> 3177

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 120
 acagtgaaca ctttggcctg cccgctcttc tccaacctgg gcagccgact ctggctacgc
 180
 aacggggccc ccgtcaatgc ctgggcctcc tgccacgtgc taccactgg ggacctgctg
 240
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 300

cagctggttag ccagctactg cccagagggtg gtggaggacg ggggtggcaga ccaaacagat
360
gagggttgga gtgtaccggt cattatcagc acatcgcggt tgagtgaccc agctggtggc
420
aaggccagct ggggtgcaga caggtcctac tggaaggagt tcttggtgat gtgcacgctc
480
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540
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660
cgagggtacc agtcctgtc agacagcccc cggggggccc gagtcttcac tgagtcagag
720
aagaggccac tcagcatcca agacagcttc gtggagggtat cccagtggtg ccccgggccc
780
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1080
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1140
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1440
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1500
gcgcgagctc aggagagatt tcgtgacaat gtacgcctt ccctcagaat tcagggaaga
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1620
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1680
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1740
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1857

<210> 3178

<211> 273

<212> PRT

<213> Homo sapiens

<400> 3178

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          20           25           30
Glu Gln Val Gln Phe Gln Pro Asn Thr Val Asn Thr Leu Ala Cys Pro
          35           40           45
Leu Leu Ser Asn Leu Ala Thr Arg Leu Trp Leu Arg Asn Gly Ala Pro
          50           55           60
Val Asn Ala Ser Ala Ser Cys His Val Leu Pro Thr Gly Asp Leu Leu
          65           70           75           80
Leu Val Gly Thr Gln Gln Leu Gly Glu Phe Gln Cys Trp Ser Leu Glu
          85           90           95
Glu Gly Phe Gln Gln Leu Val Ala Ser Tyr Cys Pro Glu Val Val Glu
          100          105          110
Asp Gly Val Ala Asp Gln Thr Asp Glu Gly Gly Ser Val Pro Val Ile
          115          120          125
Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly Lys Ala Ser Trp
          130          135          140
Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val Met Cys Thr Leu
          145          150          155          160
Phe Val Leu Ala Val Leu Leu Pro Val Leu Phe Leu Leu Tyr Arg His
          165          170          175
Arg Asn Ser Met Lys Val Phe Leu Lys Gln Gly Glu Cys Ala Ser Val
          180          185          190
His Pro Lys Thr Cys Pro Val Val Leu Pro Pro Glu Thr Arg Pro Leu
          195          200          205
Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His Arg Gly Tyr Gln
          210          215          220
Ser Leu Ser Asp Ser Pro Pro Gly Ala Arg Val Phe Thr Glu Ser Glu
          225          230          235          240
Lys Arg Pro Leu Ser Ile Gln Asp Ser Phe Val Glu Val Ser Pro Val
          245          250          255
Cys Pro Arg Pro Arg Val Arg Leu Gly Ser Glu Ile Arg Asp Ser Val
          260          265          270
Val

```

<210> 3179

<211> 3447

<212> DNA

<213> Homo sapiens

<400> 3179

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120
taaatcatga tacaaccacc acaggcaatt accatcaaat acattcccat gatttacaaa
180

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tgtatcgctt atacagagga agttgcaaaa tcaactgccag tacagacaca tccagtctaa
240
ttaactatcg tctattcata caacagcaac aactgcagct cctgagacca cagaaggaca
300
cagtgagcag ctgggtgactg agccagggtg gcctccgatc aataactgat cagagtaatg
360
agacttcgag aggaatgcct ataagaaatc tcaaaaggta tttgtttggg tgcagaaca
420
aatgcacctt ccacatttgg attttctcta gaagaatctg tggccaatc tcttatccaa
480
tgagggtact gagtggctgg atcagttacc atgcaagctc acgtagaatg agattgaatt
540
tggtttctgtg tgcacactgg gctctgggga gggaggacac ccctgtgtgt tgctgtgccc
600
ttccgtgctg tctactgtat ccttcattgt tctccaaatg gtacacgccc catgggatta
660
cagaacacag ctacagaatt aggatctcat ggtaacaatg aggaattagg ttactgtaga
720
actaaaatat gtttaatgaa attaaaatgc aatggaaaaa aaatcaggca acagaacatt
780
ctgatgaatt tacaggactg attatatccc acggcactga atgacaaaca gttcttctcc
840
atacagtcgc aatttagaggc atagaagtca tactgaatgc tgaatagaag aacactgaga
900
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960
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1020
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1080
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1140
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1260
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1320
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1740
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1800

cctgatttgt aaacagaaca acaataaaaa ataaaaacaa aacaaaaaat tcttccatgg
1860
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2520
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<210> 3180

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3180

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Thr Gln Thr Asp Gly Arg Asp Val Asn Ser Cys Leu Lys Leu Arg Cys
          20           25           30
Ala Phe Thr Pro Thr Gly Lys Val Lys Leu Thr Phe Val Phe Leu Phe
          35           40           45
Asn Asn Phe Met Ile Asn Lys Glu Leu Gln Leu Glu Thr Lys Ala Asn
          50           55           60
Ser Arg Asn Ser Leu Thr Pro Ser Cys Pro Met Val Phe Met Ile Ala
65           70           75           80
Cys Tyr Gln Asn Glu Ala Leu Cys Ser Thr Leu Tyr Ser Lys Ala Phe
          85           90           95
Tyr Ala Pro Thr Arg Pro Ser Gly Ile Pro Glu Ser Ala Leu His Thr
          100          105          110
Gly Arg Lys Thr Ala Ser Ser Tyr Arg Leu Cys Glu Asn Thr Gln
          115          120          125
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<210> 3181

<211> 287

<212> DNA

<213> Homo sapiens

<400> 3181

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180
tacacttctt caggctgtgt cctctgtgca ggtcctgagc ttttgcctcc aaaaggtctg
240
cagtatctgg tgctcttctg tcattgcccc caccggagat gcaccct
287
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<210> 3182

<211> 95

<212> PRT

<213> Homo sapiens

<400> 3182

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Arg Arg Gln Leu Asp Ala Arg Arg Asn Lys Cys Arg Ile Arg Leu Gly
          20           25           30
Gly His Met Lys Gln Gly Gly Leu Leu Lys Asp Gly Trp Ala Ser Pro
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35					40					45				
Cys	Thr	Arg	Ser	Ser	Pro	Ser	Ser	Cys	Trp	Thr	Gly	Thr	Leu	Gln
50						55					60			
Ala	Val	Ser	Ser	Val	Gln	Val	Leu	Ser	Phe	Cys	Leu	Gln	Lys	Val
65					70					75				Cys
Ser	Ile	Trp	Cys	Ser	Cys	Leu	Met	Pro	His	Thr	Gly	Asp	Ala	Pro
				85					90					95

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<210> 3183
<211> 1457
<212> DNA
<213> Homo sapiens
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400> 3183

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60	acacataacc	cacgtaaatgc	agggtactcc	tttgtccaga	cccagctcct	ggttcccaaa
120	aaagtctctc	ctgagagctg	caggctgtcc	tggaatctcc	tcggggatga	ggcagctgcc
180	gcgtggcccc	aggtgctgcc	gcagatgggc	cggtgaaga	gagtggacct	ggagaagaat
240	cagatcacag	ctttgggggc	ctggctcctg	gctgaaggac	tggcccaggg	gtctagcatc
300	caagtcatcc	gcctctggaa	taaccccatt	ccttgcgaca	tggcccagca	cctgaagagc
360	caggagccca	ggctggactt	tgctctcttt	gacaaccagc	cccaggcccc	ttggggctact
420	tgatggcccc	ctcaagacct	ttggaatcca	gccaaagtgt	gcacccaaat	gatccacctt
480	tcgcccactg	ggataaatga	ctcaggaaaag	aagagcctcg	gcagggcgct	ctgcactcca
540	cccaggagga	aggatacgtg	tgtcctgctg	cagtcctcag	ggagaacttt	tttgggaacc
600	aggagctggg	tctggacaaa	ggagtaccct	gcattacgtg	ggatatgtgt	gatcaattgg
660	ggacatgcga	cacacaatga	gggtgtcatg	acaatgcatg	acacgtacgg	ttatatgtgg
720	cagtggtgac	ccttgacatg	tggcggttaca	tgaaagtcat	tgtggcacgt	gttctgtggc
780	atgggtgctg	gcatcccaag	tggcaggata	catgatttgt	ggtctatata	tgacacatga
840	caaatgtcca	tgtcacagga	ctcatggctg	gccagatgac	ctcaggctgg	cccaagatct
900	aattttattaa	tttttaaagc	aaatacatat	ttatagattg	tgtgtatgta	gcagctaagt
960	caggaaaagt	cttcgccccg	agctggggag	ggagagtgtc	catgcatcta	ccagtcagg
1020	ggctcaaggg	ccagggtctc	ggaacaagcc	agggactcag	ccattaagtc	cctctctgcc
1080	tcaatcctca	gcctaccat	ctataaaact	gatgactcct	cccttactta	catactagct
1140	tcacaaggca	ggtggaggtg	gggcagacct	ggcggggagt	gagaagccca	gtctgtccta
1200						

tgtaagggac aaagccaggt ctaatggtac tgggtagggg gcaactgcaa gacaataagc
 1260
 taggctactg ggtccagcta ctactttggt gggattcagg tgagtctcca tgcacttcac
 1320
 atgttaccca gtgttcttgt tacttccaag gagaaccaag aatggctctg tcacactcga
 1380
 agccaggttt gatcaataaa cacaatgcta ttccaaaaaa aaaaaaaaaa aaaaaaaaaa
 1440
 aaaaaaaaaa aaaaaaa
 1457

<210> 3184

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3184

Xaa	Tyr	Val	Ser	Cys	Ile	Val	Met	Thr	Pro	Ser	Leu	Cys	Val	Ala	Cys
1				5					10					15	
Pro	Gln	Leu	Ile	Thr	His	Ile	Pro	Arg	Asn	Ala	Gly	Tyr	Ser	Phe	Val
			20					25					30		
Gln	Thr	Gln	Leu	Leu	Val	Pro	Lys	Lys	Val	Leu	Pro	Glu	Ser	Cys	Arg
		35					40					45			
Leu	Ser	Trp	Asn	Leu	Leu	Gly	Asp	Glu	Ala	Ala	Ala	Glu	Leu	Ala	Gln
	50					55			60						
Val	Leu	Pro	Gln	Met	Gly	Arg	Leu	Lys	Arg	Val	Asp	Leu	Glu	Lys	Asn
65				70					75					80	
Gln	Ile	Thr	Ala	Leu	Gly	Ala	Trp	Leu	Leu	Ala	Glu	Gly	Leu	Ala	Gln
			85					90						95	
Gly	Ser	Ser	Ile	Gln	Val	Ile	Arg	Leu	Trp	Asn	Asn	Pro	Ile	Pro	Cys
			100					105					110		
Asp	Met	Ala	Gln	His	Leu	Lys	Ser	Gln	Glu	Pro	Arg	Leu	Asp	Phe	Ala
		115					120					125			
Phe	Phe	Asp	Asn	Gln	Pro	Gln	Ala	Pro	Trp	Gly	Thr				
	130					135					140				

<210> 3185

<211> 1433

<212> DNA

<213> Homo sapiens

<400> 3185

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 60
 ctctggctcc caccaccaca gctccagagc aggaacaacg cttggctgag atgcctcagg
 120
 cctggtaacc tgaggagggtg tagagcacc cagaaggagg gtaaaagcag ggggcaaaagc
 180
 ggtggccctc cttttctggg ggtcacttct gggctggggc cagctgaaac ctgtgtccaa
 240
 gtagctttca gggctggcca caccctaagc cttgcaaaag ggcctcctgc aagggtctggc
 300
 ccatgggggc ccacacctcc cagccagtga ggtagcatg gttaggagtc cacatgtgtg
 360

caagtgcctg tgtggaggct catgtatgca tgtgtgtata tgcaaagctg cacatgacaa
 420
 tgtgcatgcc agtccagagt tagatgtacc tatgcagttg ccctcaagcg aagggtcata
 480
 ttggaaaca aggatggctc taaacatgta agcgtgcatg tgggcatgta tgtatctggg
 540
 gcctaaggag gtggggaagt ggggtgttgg gtaaggggctg gccttcaggg catttgcaga
 600
 agggaggagt ggtgggaggg aaaggctggg cagagcaggg gaaggagtga aagccaggca
 660
 ggaaagtgga agaacaggag aagctcatgt aatggattac cctccacagg attatgttcc
 720
 ttgattcctg agagtttttt ctcttgattt taccctcctca gtctatcact gcaagagaaa
 780
 gaggtagaaa agacaaacag accacaaaag acaagaaccc agacatatag acagacgcac
 840
 ctgttgcatg tgcattgagc agagcctggg agagaagaga gagcgtgcaa gagagagctc
 900
 agagcaggca ggcagccccc cccctgcagc agtgcctggg ttcactggag ccctgcagg
 960
 aagtcacga gccctgtatg ccaactcctc ggtttgtcca ggtaacaggg gtgccccgcc
 1020
 cccttcata tcagcaccgg gtggttgggc agctgcttca ggtgctcaaa gctggtctga
 1080
 cccatggggg cctggtctcc atatacaatc agagctggag tctgagagga aggatagggg
 1140
 ggtggggcag agtcaacagg acctgccata gcacccccc cctcccccac ttcagtctct
 1200
 tcctgggacc accccatatg agggagagag acaagctggc ccagtggggt ggggcacaga
 1260
 ttggtgtctg cccagagaac cagtttagca cagggtcttg cacagtagtc tgctgagtaa
 1320
 accaaaaggg tggagtggg tggtcagctc ctcccagaag acacccttg attatccagc
 1380
 cccagatga ggaagccca ggatgcaccc ttccttgctc ctggcagggc acc
 1433

<210> 3186

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3186

Met Pro Leu Leu Trp Phe Val Gln Val Thr Gly Val Pro Arg Pro Leu
 1 5 10 15
 His Asp Gln His Pro Val Val Gly Gln Leu Leu Gln Val Leu Lys Ala
 20 25 30
 Gly Leu Thr His Gly Val Leu Val Ser Ile Tyr Asn Gln Ser Trp Ser
 35 40 45
 Leu Arg Gly Arg Ile Gly Gly Trp Gly Arg Val Asn Arg Thr Cys His
 50 55 60
 Ser Ile Pro Ser Pro Pro His Phe Ser Leu Phe Leu Gly Pro Pro His
 65 70 75 80
 Met Arg Glu Arg Asp Lys Leu Ala Gln Trp Val Gly Ala Gln Ile Gly

				85					90					95				
Val	Cys	Pro	Arg	Thr	Gln	Phe	Ser	Thr	Gly	Leu	Gly	Thr	Val	Val	Cys			
				100				105					110					

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<210> 3187
<211> 860
<212> DNA
<213> Homo sapiens
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400> 3187
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60
tatctaccag gagacggagt ttcgctatgt tcccagact ggttttgaa ccttgcccta
120
aagtggctct cccgcctcgg cctcctgagt agctgggatt acagatatgt tcctaaaaa
180
tcctctgagt caccaccttg gccagaagtt gttctgccag acccagttga ggagaccaga
240
caccatgcag aggtcgtgaa gaagggtgaat gagatgatcg tcacggggca gtatggcagg
300
ctcttttcgg tggtcgactt tgcacgccg cagtggaaag tgacctctga agacctgatc
360
ttaattggaa atgaactaga ccttgctgtg ggagagagaa ttcgactgga gaaggtcctg
420
ctggttgggg cagacaactt cacgctgctt ggcaagccac tcctcgggta atggctgtga
480
agtgtctggc ttgtctggg gctccagggc tggacatgca gacagtggtc acagtgcaat
540
tagggccaga aggatcttgc tcgagtagaa gccacagtca ttgaaaagac agaatactgg
600
ccaagaatca ttatgagatt caggaaaaagg aaaaacttca agaagaaaaa agtaagtta
660
gagaaaagta cgctggggcc tgttcgcagg tgctggttgc ccaggcgcat gcggaaggag
720
ggtgtggggc acgtgggtct cgggacagga agcccaggca ggtctcaacc tggctgccac
780
tgcccacttg ccacctcat cctagaggga gcaccagag ggtccagcct cgctccccct
840
ctcctccagc ctccacgcgt
860

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<210> 3188
<211> 120
<212> PRT
<213> Homo sapiens
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400> 3188																	
Thr	Pro	Gly	Leu	Lys	Trp	Ser	Ser	Arg	Leu	Gly	Leu	Leu	Ser	Ser	Trp		
1				5				10						15			
Asp	Tyr	Arg	Tyr	Val	Pro	Lys	Thr	Ser	Leu	Ser	Ser	Pro	Pro	Trp	Pro		
			20					25					30				
Glu	Val	Val	Leu	Pro	Asp	Pro	Val	Glu	Glu	Thr	Arg	His	His	Ala	Glu		
			35				40					45					
Val	Val	Lvs	Lvs	Val	Asn	Glu	Met	Ile	Val	Thr	Gly	Gln	Tyr	Gly	Arg		

```

      50              55              60
Leu Phe Ala Val Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser
65              70              75              80
Glu Asp Leu Ile Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu
      85              90              95
Arg Ile Arg Leu Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr
      100              105              110
Leu Leu Gly Lys Pro Leu Leu Gly
      115              120

```

<210> 3189

<211> 440

<212> DNA

<213> Homo sapiens

<400> 3189

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nngggccctt aagggcatgg atggggccgg actctggcct ggctgtcaac aagagggctg
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agcctgggga agcaagtccc tgttttcagt accacctgca tccccaggg cagcatcctt
120
gactccctt ctgggcagtg gctgcctgc tttctctgtc tcttcaggg tgtgctgtcc
180
gacctacca aagtgaccog gatgcatgga atcgaccctg tgggtctggt cctgatgggt
240
ggcatgggta tggtcacctt ggggttcgcc ggctgcgtgg gggctctgcg ggagaatatc
300
tgcttgctca actttgtgag tggccacaga gacaagagtg ggatatgatg caatggggta
360
caggctctgc tgggcaggat tatatgttac ctggtcagag cagggtggcag ctcttaggag
420
cctcccctat ggcccctgcc
440

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<210> 3190

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3190

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Gly His Gly Trp Gly Arg Thr Leu Ala Trp Leu Ser Thr Arg Gly Leu
1              5              10              15
Ser Leu Gly Lys Gln Val Pro Val Phe Ser Thr Thr Cys Ile Pro Gln
      20              25              30
Gly Ser Ile Leu Asp Ser Pro Ser Gly Pro Val Leu Pro Cys Phe Leu
      35              40              45
Cys Leu Phe Gln Gly Val Leu Ser Asp Leu Thr Lys Val Thr Arg Met
      50              55              60
His Gly Ile Asp Pro Val Val Leu Val Leu Met Val Gly Met Val Met
      65              70              75              80
Phe Thr Leu Gly Phe Ala Gly Cys Val Gly Ala Leu Arg Glu Asn Ile
      85              90              95
Cys Leu Leu Asn Phe Val Ser Gly His Arg Asp Lys Ser Gly Ile
      100              105              110

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<210> 3191

<211> 266

<212> DNA

<213> Homo sapiens

<400> 3191

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 60
 accttttgcg gcagtcgcta aattgccacg ggtcgtcttt gctctctcta ctctggagcg
 120
 aacagcagga caatccacac ttccgtagcc tctgtgggtc ggccgccgag ccagccccggg
 180
 gcccgccgcc ccagcaccgc ttgcagggca gaaaagagaa gagagttgac aacatcgaga
 240
 tacagaaatt catctcccaa aaagcg
 266

<210> 3192

<211> 84

<212> PRT

<213> Homo sapiens

<400> 3192

Met	Asn	Phe	Cys	Ile	Ser	Met	Leu	Ser	Thr	Leu	Phe	Ser	Phe	Leu	Pro
1				5					10					15	
Cys	Asn	Gly	Cys	Trp	Gly	Gly	Gly	Pro	Arg	Ala	Gly	Ser	Ala	Ala	Asp
			20					25					30		
Pro	Arg	Arg	Leu	Arg	Lys	Cys	Gly	Leu	Ser	Cys	Cys	Ser	Leu	Arg	Ser
			35				40					45			
Arg	Glu	Ser	Lys	Asp	Asp	Pro	Trp	Gln	Phe	Ser	Asp	Cys	Arg	Lys	Arg
	50				55					60					
Ser	Arg	Ser	Met	Ala	Gln	Val	Ala	Asp	Thr	Glu	Gln	Gly	Thr	Ile	Ser
65					70					75				80	
Pro	Ser	Ala	Ser												

<210> 3193

<211> 567

<212> DNA

<213> Homo sapiens

<400> 3193

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 acagcctgcc tgagtgttca gatccaggct ctgccagag ctggatgtaa atttatgacc
 120
 tggagtgagt tgttttgcc ctctgagcct cagttttctc atctgtgaaa tggggacaac
 180
 agcagttcct tccaggaggg taaaaggagg agaaaaagaa tgcagatcca gcctctcgga
 240
 gaggcagcgg ttcagtcttt gcatgcaaag tgcccagccc ttggctcaaa gtctgtgttc
 300
 atccagacct ggggttaacta ctgtcttctc tatgtgtgtc ctgtggggac gcttggggct
 360

gctggcctcg tgattcctct ctttccctgc aggccacggt tcacctactt ccccttctcc
 420
 ctggggccacc gctctgcat cgggcagcag ttgtctcaga tggagggtgaa ggtggtcatg
 480
 gcaaagctgc tgcagagget ggagtccgg ctggtgcccg ggcagcgctt cgggctgcag
 540
 gagcaggcca cactcaagcc actggac
 567

<210> 3194
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 3194
 Met Gln Ile Gln Pro Ser Ala Glu Ser Ala Val His Ala Leu His Ala
 1 5 10 15
 Lys Cys Pro Ala Pro Gly Ser Lys Ser Val Phe Ile Gln Thr Trp Val
 20 25 30
 Asn Tyr Cys Leu Pro Tyr Val Val Pro Val Gly Thr Pro Gly Ala Ala
 35 40 45
 Gly Leu Val Ile Pro Leu Phe Pro Cys Arg Pro Arg Phe Thr Tyr Phe
 50 55 60
 Pro Phe Ser Leu Gly His Arg Ser Cys Ile Gly Gln Gln Phe Ala Gln
 65 70 75 80
 Met Glu Val Lys Val Val Met Ala Lys Leu Leu Gln Arg Leu Glu Phe
 85 90 95
 Arg Leu Val Pro Gly Gln Arg Phe Gly Leu Gln Glu Gln Ala Thr Leu
 100 105 110
 Lys Pro Leu Asp
 115

<210> 3195
 <211> 987
 <212> DNA
 <213> Homo sapiens

<400> 3195
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 60
 gcctcgacta cgaacgcaag accaaagtgg atttcgatga ctctctccca gctatccgga
 120
 agccccagac acctacctcc ttggctggat cagccaaagg tgggcaagac gggtcacagc
 180
 gttcaagcat ccactttgaa acggaagagg ctaaccgttc ctttctctcg gggatcaaga
 240
 ccattttgaa gaagagcccc gagcccaagg aggatccgc tcacctgtct gactcgtcct
 300
 catcctccgg ctccatcgtg tcttcaaaa gtgctgacag catcaaaagt cgaccaggaa
 360
 tcccacgact tgcgggtgac ggtggcgagc gaacgtcccc cgagcggaga gagccaggga
 420
 cggggaggaa agacgacgat gttgcgagca taatgaagaa atacctccag aagtaggaac
 480

cagtttcagcc tccctgaagc tgccttgaa gacttccga ctctacaata acttggagac
 540
 agagagactg gccaggcctc cccggtggcc agagccagcc agcatggcca cctcaagag
 600
 gcgagatgag cccacagagg catatcctgc ggggatgctg ggctccagc gtggttggcc
 660
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 720
 ggattccaga gagtgtatgg ggtgcagata ggggtaggac tgttagaata gaaccaaccc
 780
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 840
 gaccttcttc ctctcttca ctgggccagt ttcagctcac ttctccagg aagtctttcc
 900
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 960
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 987

<210> 3196

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3196

Met	Glu	Glu	Pro	Leu	Gly	Ser	Asp	Pro	Phe	Ser	Trp	Lys	Leu	Pro	Ser
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Leu	Asp	Tyr	Glu	Arg	Lys	Thr	Lys	Val	Asp	Phe	Asp	Asp	Phe	Leu	Pro
			20					25					30		
Ala	Ile	Arg	Lys	Pro	Gln	Thr	Pro	Thr	Ser	Leu	Ala	Gly	Ser	Ala	Lys
			35				40					45			
Gly	Gly	Gln	Asp	Gly	Ser	Gln	Arg	Ser	Ser	Ile	His	Phe	Glu	Thr	Glu
			50			55					60				
Glu	Ala	Asn	Arg	Ser	Phe	Leu	Ser	Gly	Ile	Lys	Thr	Ile	Leu	Lys	Lys
65					70					75				80	
Ser	Pro	Glu	Pro	Lys	Glu	Asp	Pro	Ala	His	Leu	Ser	Asp	Ser	Ser	Ser
				85				90						95	
Ser	Ser	Gly	Ser	Ile	Val	Ser	Phe	Lys	Ser	Ala	Asp	Ser	Ile	Lys	Ser
				100				105					110		
Arg	Pro	Gly	Ile	Pro	Arg	Leu	Ala	Gly	Asp	Gly	Gly	Glu	Arg	Thr	Ser
				115			120					125			
Pro	Glu	Arg	Arg	Glu	Pro	Gly	Thr	Gly	Arg	Lys	Asp	Asp	Asp	Val	Ala
				130		135					140				
Ser	Ile	Met	Lys	Lys	Tyr	Leu	Gln	Lys							
145					150										

<210> 3197

<211> 5575

<212> DNA

<213> Homo sapiens

<400> 3197

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ctggctgaca cagcaagact atgtttaaaa aaaaagagag agaaaaaaa acaagaagga
120
agagcaatgg cgacactgga tcgcaaagtg cccagtcgag aggcgtttct gggcaaaccc
180
tggtcctcct ggatcgacgc cgccaaatta cactgctcgc acaatgtaga tttagaagag
240
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300
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360
caggctgctca agccacaggt tttccagtcg cactgcgaga gaagacacgg ttcaatgtgt
420
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480
aaaacaaaaa cctgtctcag cggccatcac tctgccagca gcacctcaaa gccattcaaa
540
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600
ggatcaaggg ataaaccatg tgttccagtt cctgtagtca gtttagagaa aattcctaac
660
ctagtgaaagg cagatggtgc caatgtcaaa atgaactcca caaccactac tgcagtttct
720
gcctccccc cctcgtcttc tgccgtctcc acccctcctt taattaagcc tgtcctgatg
780
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840
accatagaca agaaacacca aaatggcacc aaaaacagca acaagccta caggagactt
900
tcagagagag aatttgaccc aaataaacac tgtggagtat tggatcccca gacaaagaaa
960
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1020
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1080
gaagttaaa ataaagagca tctcctgact tcacgaggg aaataacttc aagccaatcc
1140
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1200
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agcataagca gcagcacatc ttcaaatcat agcgggccata ctccagagcc cccactccca
1320
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1380
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1440
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1500
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1560
aagatccctc ctgcggcaga tagcccatg ccctcgccag cagecccat caccaccccc
1620
gttccagcat ccgttttgca gcctttcagc aaccccagtg ctgtgtatct tccttcagct
1680

cccatcagct cgagactcac ctcttcttac ataatgacat cagccatgct ctcagacgca
1740
gctttcgtga catcgccgga cccgagcgcc ctcatgtccc acaccacagc tttccctcat
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1920
tcaaaagta aagacctgtc caccgtagc gacgagtctc caagtaacaa aaaaaggaag
1980
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2040
tcgtctccac tgtcagggcc tcacaaaaag aactgtgttt tgaatgccag ttctgtttg
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2160
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2220
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2280
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2460
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2580
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<211> 833

<212> PRT

<213> Homo sapiens

<400> 3198

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Asn	Val	Asp	Leu	Glu	Glu	Ala	Gly	Lys	Glu	Gly	Gly	Lys	Ser	Arg	Glu
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Val	Met	Arg	Leu	Asn	Lys	Glu	Asp	Met	His	Leu	Phe	Gly	His	Tyr	Pro
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Ala	His	Asp	Asp	Phe	Tyr	Leu	Val	Val	Cys	Ser	Ala	Cys	Asn	Gln	Val
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Val	Lys	Pro	Gln	Val	Phe	Gln	Ser	His	Cys	Glu	Arg	Arg	His	Gly	Ser
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Thr	Ser	Leu	Val	Gln	Val	Lys	Thr	Lys	Ala	Cys	Leu	Ser	Gly	His	His
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Pro	Asn	Leu	Val	Lys	Ala	Asp	Gly	Ala	Asn	Val	Lys	Met	Asn	Ser	Thr
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Thr	Thr	Thr	Ala	Val	Ser	Ala	Ser	Pro	Thr	Ser	Ser	Ser	Ala	Val	Ser

Thr	Pro	Leu	Ile	Lys	Pro	Val	Leu	Met	Ser	Lys	Ser	Val	Pro	Pro
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Asp	Lys	Lys	His	Gln	Asn	Gly	Thr	Lys	Asn	Ser	Asn	Lys	Pro	Tyr
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Arg	Leu	Ser	Glu	Arg	Glu	Phe	Asp	Pro	Asn	Lys	His	Cys	Gly	Val
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Asp	Pro	Glu	Thr	Lys	Lys	Pro	Cys	Thr	Arg	Ser	Leu	Thr	Cys	Lys
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His	Ser	Leu	Ser	His	Arg	Arg	Ala	Val	Pro	Gly	Arg	Lys	Lys	Gln
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Lys	Asp	Lys	Glu	His	Leu	Leu	Thr	Ser	Thr	Arg	Glu	Ile	Leu	Pro
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Gln	Ser	Gly	Pro	Ala	Gln	Asp	Ser	Leu	Gly	Ser	Ser	Gly	Ser	Ser
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Gly	Pro	Glu	Pro	Lys	Val	Ala	Ser	Pro	Ala	Lys	Ser	Arg	Pro	Pro
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Ser	Val	Leu	Pro	Arg	Pro	Ser	Ser	Ala	Asn	Ser	Ile	Ser	Ser	Ser
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Gly	Ala	Asp	Glu	Ser	Glu	Lys	Leu	Asp	Cys	Gln	Phe	Ser	Thr	His
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Pro	Arg	Pro	Leu	Ala	Phe	Cys	Ser	Phe	Gly	Ser	Arg	Leu	Met	Gly
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Gly	Tyr	Tyr	Val	Phe	Asp	Arg	Arg	Trp	Asp	Arg	Phe	Arg	Phe	Ala
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				465						475				480
Pro	Pro	Ala	Ala	Asp	Ser	Pro	Met	Pro	Ser	Pro	Ala	Ala	His	Ile
				485						490				495
Thr	Pro	Val	Pro	Ala	Ser	Val	Leu	Gln	Pro	Phe	Ser	Asn	Pro	Ser
				500					505					510
Val	Tyr	Leu	Pro	Ser	Ala	Pro	Ile	Ser	Ser	Arg	Leu	Thr	Ser	Ser
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Ile	Met	Thr	Ser	Ala	Met	Leu	Ser	Asp	Ala	Ala	Phe	Val	Thr	Ser
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Asp	Pro	Ser	Ala	Leu	Met	Ser	His	Thr	Thr	Ala	Phe	Pro	His	Val
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Ala	Thr	Leu	Ser	Ile	Met	Asp	Ser	Thr	Phe	Lys	Ala	Pro	Ser	Ala
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His Asn Ser Asn Asn Gly Val Ser Pro Leu Ser Ala Lys Leu Glu Pro
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Ser Gly Arg Thr Ser Leu Pro Gly Gly Pro Ala Asp Ile Val Arg Gln
        690          695          700
Val Gly Ala Val Gly Gly Ser Ser Asp Ser Cys Pro Leu Ser Val Pro
        705          710          715          720
Ser Leu Ala Leu His Ala Gly Asp Leu Ser Leu Ala Ser His Asn Ala
        725          730          735
Val Ser Ser Leu Pro Leu Ser Phe Asp Lys Ser Glu Gly Lys Lys Arg
        740          745          750
Lys Asn Ser Ser Ser Ser Lys Ala Cys Lys Ile Thr Lys Met Pro
        755          760          765
Gly Met Asn Ser Val His Lys Lys Asn Pro Pro Ser Leu Leu Ala Pro
        770          775          780
Val Pro Asp Pro Val Asn Ser Thr Ser Ser Arg Gln Val Gly Lys Asn
        785          790          795          800
Ser Ser Leu Ala Leu Ser Gln Ser Ser Pro Ser Ser Ile Ser Ser Pro
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Gly His Ser Arg Gln Asn Thr Asn Arg Thr Gly Arg Ile Arg Thr Leu
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<210> 3199

<211> 777

<212> DNA

<213> Homo sapiens

<400> 3199

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<210> 3200

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3200

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Leu	Leu	Phe	Gly	Gln	Pro	Arg	Pro	Arg	Ser	Ser	Leu	Ser	Gln	Gly	Cys
			20					25					30		
Asp	Thr	Leu	Phe	Gly	Ala	Leu	Arg	Phe	Leu	Ala	Ser	Pro	Ser	Phe	Trp
		35					40					45			
Val	Ser	Pro	Arg	Ser	Pro	Val	Pro	Ala	Val	Gly	Ala	Ala	Cys	Cys	Met
		50				55					60				
Pro	Gly	Pro	Ala	Thr	Ala	Ser	Gln	Arg	Ala	Gly	Ala	Leu	Thr	Ser	Thr
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<210> 3201

<211> 390

<212> DNA

<213> Homo sapiens

<400> 3201

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<210> 3202

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3202

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Gly Thr Glu Val Ser Ser Cys Thr Gly Ala Arg Ile Asn Thr Ala			
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Val Ala Glu Gly Pro Gly Gly Val Gln Val Pro Asn Pro Ser Glu Pro			
	50	55	60
Asp Pro Asp Met Gly Pro Val Ser Trp Gly Pro Pro Leu Cys Pro Val			
	65	70	75
Val Ala Asp Pro Glu Arg Glu Gly Cys Gly Asp Ala His Met Thr Leu			
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<210> 3203

<211> 1906

<212> DNA

<213> Homo sapiens

<400> 3203

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<210> 3204

<211> 424

<212> PRT

<213> Homo sapiens

<400> 3204

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			20					25					30		
His	Arg	Leu	Cys	Gly	Asp	Leu	Val	Ser	Cys	Phe	Gln	Glu	Arg	Ala	Arg
			35				40					45			
Ile	Glu	Lys	Ala	Tyr	Ala	Gln	Gln	Leu	Ala	Asp	Trp	Ala	Arg	Lys	Trp
			50			55					60				
Arg	Gly	Thr	Val	Glu	Lys	Gly	Pro	Gln	Tyr	Gly	Thr	Leu	Glu	Lys	Ala
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Trp	His	Ala	Phe	Phe	Thr	Ala	Ala	Glu	Arg	Leu	Ser	Ala	Leu	His	Leu
			85						90					95	
Glu	Val	Arg	Glu	Lys	Leu	Gln	Gly	Gln	Asp	Ser	Glu	Arg	Val	Arg	Ala
			100					105					110		
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Arg Lys Asp Glu Lys Thr Ala Gln Thr Arg Glu Ser His Ala Lys Ala
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Asp Ser Ala Val Ser Gln Glu Gln Leu Arg Lys Leu Gln Glu Arg Val
180              185              190
Glu Arg Cys Ala Lys Glu Ala Glu Lys Thr Lys Ala Gln Tyr Glu Gln
195              200              205
Thr Leu Ala Glu Leu His Arg Tyr Thr Pro Arg Tyr Met Glu Asp Met
210              215              220
Glu Gln Ala Phe Glu Thr Cys Gln Ala Ala Glu Arg Gln Arg Leu Leu
225              230              235              240
Phe Phe Lys Asp Met Leu Leu Thr Leu His Gln His Leu Asp Leu Ser
245              250              255
Ser Ser Glu Lys Phe His Glu Leu His Arg Asp Leu His Gln Gly Ile
260              265              270
Glu Ala Ala Ser Asp Glu Glu Asp Leu Arg Trp Trp Arg Ser Thr His
275              280              285
Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp Ser Leu
290              295              300
Asp Thr Gln Arg Thr Ile Ser Arg Lys Glu Lys Gly Gly Arg Ser Pro
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Trp Ser Asp Glu Glu Ser Pro Arg Lys Ala Ala Thr Gly Val Arg Val
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<210> 3205

<211> 1482

<212> DNA

<213> Homo sapiens

<400> 3205

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 840
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 900
 caccctgggg ctcaccaagg caacctggcc tccggtcttc atagcaatgc aatagccagc
 960
 cctggaagcc ccagcctggg ccgtcacctc ggagggtctg gatctgtggt tcccggcagc
 1020
 ccctgcttgg accggcatgt ggccatggc ggctattcta ccccgaggga tcggagaccc
 1080
 aactgtctcc ggcagagcag tgcctctggc taccaggctc cttccacgcc ctccttcct
 1140
 gtctccctct cctactaccc tggcctgagc agccctgcca cctccccgct accagactcc
 1200
 gcagccttcc ggcaaggagg cccaacacca gccttgccag agaagcgaag gatgtcagtg
 1260
 ggagaccggg caggcagcct cccaactat gccaccatca atgggaaggt gtcttcgct
 1320
 gtccgccagc gcattgtccg tccagtgagg ggcagcaccg tctcctctc ccacactctg
 1380
 cccgacttct ccaagtactc catgccagac aacagcccg agacgcgggc taaagtgaag
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<210> 3206

<211> 494

<212> PRT

<213> Homo sapiens

<400> 3206

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					20				25					30	
Lys	Pro	His	Asn	Pro	Ala	Asp	Ile	Leu	Leu	His	Pro	Thr	Gly	Glu	Pro

35										40										45										
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50																55														
Ala	Gln	Asp	Ser	Glu	Pro	Lys	Ser	Phe	Ser	Ala	Pro	Ala	Thr	Gln	Ala	60														
65						70										75														80
Tyr	Gly	His	Glu	Ile	Pro	Leu	Arg	Asn	Gly	Thr	Leu	Gly	Gly	Ser	Phe	90														95
				85												100														
Val	Ser	Pro	Ser	Pro	Leu	Ser	Thr	Ser	Ser	Pro	Ile	Leu	Ser	Ala	Asp	105														
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Ser	Thr	Ser	Val	Gly	Ser	Phe	Pro	Ser	Gly	Glu	Ser	Ser	Asp	Gln	Gly	115														
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Pro	Arg	Thr	Pro	Thr	Gln	Pro	Leu	Leu	Glu	Ser	Gly	Phe	Arg	Ser	Gly	125														
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Ser	Leu	Gly	Gln	Pro	Ser	Pro	Ser	Ala	Gln	Arg	Asn	Tyr	Gln	Ser	Ser	135														
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145						150										155														160
Ser	Pro	Leu	Pro	Thr	Val	Gly	Ser	Ser	Tyr	Ser	Ser	Pro	Asp	Tyr	Ser	165														
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Arg	Thr	Val	Gly	Thr	Asn	Thr	Pro	Pro	Ser	Pro	Gly	Phe	Gly	Trp	Arg	205														
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Ala	Ile	Asn	Pro	Ser	Met	Ala	Ala	Pro	Ser	Ser	Pro	Ser	Leu	Ser	His	215														
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225						230										235														240
His	Gln	Met	Met	Gly	Pro	Pro	Gly	Thr	Gly	Phe	His	Gly	Ser	Thr	Val	245														
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Ser	Ser	Pro	Gln	Ser	Ser	Ala	Ala	Thr	Thr	Pro	Gly	Ser	Pro	Ser	Leu	255														
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Cys	Arg	His	Pro	Ala	Gly	Val	Tyr	Gln	Val	Ser	Gly	Leu	His	Asn	Lys	265														
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Val	Ala	Thr	Thr	Pro	Gly	Ser	Pro	Ser	Leu	Gly	Arg	His	Pro	Gly	Ala	275														
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His	Gln	Gly	Asn	Leu	Ala	Ser	Gly	Leu	His	Ser	Asn	Ala	Ile	Ala	Ser	285														
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305						310										315														
Pro	Gly	Ser	Pro	Ser	Leu	Gly	Arg	His	Leu	Gly	Gly	Ser	Gly	Ser	Val	320														
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																335														
340																345														
Ser	Thr	Pro	Glu	Asp	Arg	Arg	Pro	Thr	Leu	Ser	Arg	Gln	Ser	Ser	Ala	350														
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Ser	Gly	Tyr	Gln	Ala	Pro	Ser	Thr	Pro	Ser	Phe	Pro	Val	Ser	Pro	Ala	360														
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370																375														
Tyr	Tyr	Pro	Gly	Leu	Ser	Ser	Pro	Ala	Thr	Ser	Pro	Ser	Pro	Asp	Ser	380														
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Ala	Ala	Phe	Arg	Gln	Gly	Ser	Pro	Thr	Pro	Ala	Leu	Pro	Glu	Lys	Arg	390														
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Arg	Met	Ser	Val	Gly	Asp	Arg	Ala	Gly	Ser	Leu	Pro	Asn	Tyr	Ala	Thr	400														
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Ile	Asn	Gly	Lys	Val	Ser	Ser	Pro	Val	Ala	Ser	Gly	Met	Ser	Ser	Pro	410														
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420																425														
Ser	Gly	Gly	Ser	Thr	Val	Ser	Phe	Ser	His	Thr	Leu	Pro	Asp	Phe	Ser	430														
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440																445														
Ser	Gly	Gly	Ser	Thr	Val	Ser	Phe	Ser	His	Thr	Leu	Pro	Asp	Phe	Ser	450														
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Lys	Tyr	Ser	Met	Pro	Asp	Asn	Ser	Pro	Glu	Thr	Arg	Ala	Lys	Val	Lys	460														

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465                               470                               475                               480
Phe Val Gln Asp Thr Ser Lys Tyr Trp Tyr Lys Pro Lys Ile
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<210> 3207
<211> 495
<212> DNA
<213> Homo sapiens

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120
ctgtcgcga agctgcataa gatcctggag acgcggtcgg acaacgaca ggagatgtta
180
gaagctctca aggcactttc aacctttttt gttgaaaata gtctgcggac tcgaagaaat
240
ttacgtggag atattgaacg taaaagttta gccatcaatg aagaatttgt aagcattttc
300
aagggaagtga aggaggaact tgaaagcata agcgaagatg ttcaagcaat gagcaactgt
360
tgtcaagata tgacaagtcg cctacaggca gcaaaggaac agactcaaga tttaatagta
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aataccacta agcttcaatc tgaaagccaa aaattagaga taagagctca agttgcagat
480
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495

<210> 3208
<211> 107
<212> PRT
<213> Homo sapiens

<400> 3208
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Leu Arg Thr Arg Arg Asn Leu Arg Gly Asp Ile Glu Arg Lys Ser Leu
20         25         30
Ala Ile Asn Glu Glu Phe Val Ser Ile Phe Lys Glu Val Lys Glu Glu
35         40         45
Leu Glu Ser Ile Ser Glu Asp Val Gln Ala Met Ser Asn Cys Cys Gln
50         55         60
Asp Met Thr Ser Arg Leu Gln Ala Ala Lys Glu Gln Thr Gln Asp Leu
65         70         75         80
Ile Val Asn Thr Thr Lys Leu Gln Ser Glu Ser Gln Lys Leu Glu Ile
85         90         95
Arg Ala Gln Val Ala Asp Ala Phe Leu Ser Lys
100        105

<210> 3209
<211> 346
<212> DNA
<213> Homo sapiens

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<400> 3209
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 tgcgtccagc cttgtccctt ctgacctggg ccctaccacac ggggaaatgt tcccatagca
 120
 gaagaatcag cccacacatg caggggtgtg ttagtgggga acgggctctg ggctcctgtg
 180
 ggaaccaggg accccctatc ttggtaccgg tcattggatg tatccccagc tcatgcctgt
 240
 gtctgtcttg gccctgtgg tcacctgtg ttcattctctc tccagccat ggcctctcaa
 300
 actgggggtt tcgtctccct atgagggggg cctgggtatgt acgcgt
 346

<210> 3210
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 3210
 Met Arg Pro Ala Leu Ser Leu Leu Thr Trp Ala Leu Pro Thr Gly Lys
 1 5 10 15
 Cys Ser His Ser Arg Arg Ile Ser Pro Thr Val Gln Gly Cys Val Ser
 20 25 30
 Gly Glu Arg Ala Leu Gly Ser Cys Gly Asn Gln Gly Pro Pro Ile Leu
 35 40 45
 Val Pro Val Ile Gly Cys Ile Pro Ser Ser Cys Leu Cys Leu Ser Trp
 50 55 60
 Pro Val Trp Ser Pro Cys Val His Leu Ser Pro Ser His Gly Leu Ser
 65 70 75 80
 Asn Trp Gly Phe Arg Leu Pro Met Arg Gly Ser Trp Tyr Val Arg
 85 90 95

<210> 3211
 <211> 1728
 <212> DNA
 <213> Homo sapiens

<400> 3211
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 120
 gtttctcttg ccatcgtgca agccagtcgc aaggaccagg gactctatta ctgctgcac
 180
 aagaacagct acggaaaagt gactgctgaa tttaacctca cagctgaagt tctcaaacag
 240
 ctgtcaagtc acacagaata ctaaaggatg tgaagagatt gaattcagcc aactcatctt
 300
 caaagaagac ttctccatg acagctaact tggggggcgc ctgcgtgggc agatcgccac
 360
 ggaggagctg cactttggag aaggggttca ccgcaaagcc ttccgcagca cagtgatgca
 420

cggcctcatg cctgtcttca aacctggcca tgccctgtgtg cttaaggtgc acaatgccat
 480
 tgccctatggg accagaaata atgatgagct catccaaagg aactacaaac tcgctgccca
 540
 ggaatgctat gttcaaaata ctgccaggta ttatgccaaag atctacgctg ctgaagcaca
 600
 gcctctggaa ggctttggag aagtacctga gatcattcct atttttctta tccatcggcc
 660
 tgagaacaat atcccgatg ctacagtga ggaggagctg attggagaat ttgtgaagta
 720
 ttccatcagg gatgggaaag aataaaactt cttgagaaga gaatcagaag ctggtcagaa
 780
 atgttcgacc ttccagcact ggggtgtacca gaaaacaagt ggctgcctcc tgggtacgga
 840
 catgcaagg gttagaatga agctaactga cgttggcata gcaacgctgg ctaagggtta
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 gaagcagcgg agcattggga aaagcaaaagt tcaacaaac tctatgacag taaagaaggc
 1080
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 1140
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 1200
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 1260
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 1320
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 1380
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 1440
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 1500
 ctgggatttc tagacacatc ctgctgtgat gtaaacagaa atcacgaatt cgctcactgg
 1560
 atcaagttgt tccactgggt tctaatacgc tattgttgcc ggagggtgggt tctgtgacgt
 1620
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 1680
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 1728

<210> 3212

<211> 87

<212> PRT

<213> Homo sapiens

<400> 3212

Ser Gly Asn Ile Lys Leu Ser Tyr Gln Phe Ser Glu Ile His Glu Asp

1

5

10

15

Ser Thr Val Cys Trp Thr Lys Asp Ser Lys Ser Ile Ala Gln Ala Lys

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          20          25          30
Lys Ser Ala Gly Asp Asn Ser Ser Val Ser Leu Ala Ile Val Gln Ala
      35          40          45
Ser Pro Lys Asp Gln Gly Leu Tyr Tyr Cys Cys Ile Lys Asn Ser Tyr
      50          55          60
Gly Lys Val Thr Ala Glu Phe Asn Leu Thr Ala Glu Val Leu Lys Gln
      65          70          75          80
Leu Ser Ser His Thr Glu Tyr
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<210> 3213
 <211> 348
 <212> DNA
 <213> Homo sapiens

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<400> 3213
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ttaccgtca tcatggctaa tgaggactgt cccaaggctg ctgatagatcc tttttcatca
120
gataaacatg cccaactcat ctggcccaa atcaataaga tgagaaatgg acagcatttc
180
tgtgatgtgc agctgcaagt tggacaggaa agttttaaag ctcatcggtt gggtttgggt
240
gccagcagtc cttactttgc agctttgttc actggaggaa tgaaagagtc ctcaaaagat
300
gttgtaccga ttctaggaat tgaagcagga atctttcaga tactttcta
348

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<210> 3214
 <211> 92
 <212> PRT
 <213> Homo sapiens

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<400> 3214
Met Ala Asn Glu Asp Cys Pro Lys Ala Ala Asp Ser Pro Phe Ser Ser
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Asp Lys His Ala Gln Leu Ile Leu Ala Gln Ile Asn Lys Met Arg Asn
      20          25          30
Gly Gln His Phe Cys Asp Val Gln Leu Gln Val Gly Gln Glu Ser Phe
      35          40          45
Lys Ala His Arg Leu Val Leu Ala Ala Ser Ser Pro Tyr Phe Ala Ala
      50          55          60
Leu Phe Thr Gly Gly Met Lys Glu Ser Ser Lys Asp Val Val Pro Ile
      65          70          75          80
Leu Gly Ile Glu Ala Gly Ile Phe Gln Ile Leu Leu
          85          90

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<210> 3215
 <211> 597
 <212> DNA
 <213> Homo sapiens

<400> 3215

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 120
 accttcaagt tcgacttgga cggggacgca cccgatgaaa ttgccacgta tatgggtggag
 180
 catgacttta tcctgcaggc cgagcgggaa acgttcacgc agcagatgaa ggatgtcatg
 240
 gacaaggcag aggacatgct cagcgaggac acagacgcgc accgtggctc cgaccagggg
 300
 accagccccg cacacctcag cacctgcggc ctggggcaccg gggaggagag cgcacaatcc
 360
 caagccaacg cccccgtgta tcagcagaac gtcctgcaca ccgggaagag gtggttcac
 420
 atctgtccgg tgcctgagcc ccccccccc gagggccctt gaattcttcg ccccaattcc
 480
 tctaagctcc ctgccgccag aagccagcca agattcagcg cctataaag accagctgtc
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 597

<210> 3216

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3216

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Ile	Leu	Asn	Val	Cys	Asn	Thr	Gly	Asp	Lys	Met	Val	Glu	Cys	Gln	Leu
			20					25					30		
Glu	Thr	His	Asn	His	Lys	Met	Val	Thr	Phe	Lys	Phe	Asp	Leu	Asp	Gly
		35				40					45				
Asp	Ala	Pro	Asp	Glu	Ile	Ala	Thr	Tyr	Met	Val	Glu	His	Asp	Phe	Ile
	50				55					60					
Leu	Gln	Ala	Glu	Arg	Glu	Thr	Phe	Ile	Glu	Gln	Met	Lys	Asp	Val	Met
65				70					75					80	
Asp	Lys	Ala	Glu	Asp	Met	Leu	Ser	Glu	Asp	Thr	Asp	Ala	Asp	Arg	Gly
			85					90						95	
Ser	Asp	Pro	Gly	Thr	Ser	Pro	Pro	His	Leu	Ser	Thr	Cys	Gly	Leu	Gly
		100				105						110			
Thr	Gly	Glu	Glu	Ser	Arg	Gln	Ser	Gln	Ala	Asn	Ala	Pro	Val	Tyr	Gln
	115					120						125			
Gln	Asn	Val	Leu	His	Thr	Gly	Lys	Arg	Trp	Phe	Ile	Ile	Cys	Pro	Val
	130				135						140				
Pro	Glu	Pro	Pro	Ala	Pro	Glu	Gly	Pro							
145					150										

<210> 3217

<211> 2570

<212> DNA

<213> Homo sapiens

<400> 3217

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120
accatacca ggcactatga gctttacagg cgctgcaaac tggaggaaat gggctttaca
180
gatgtggggcc cagaaaacaa gccagtcagt gttcaagaga cctatgaagc caaaagacat
240
gagttccatg gtgaacgtca gaggaaggaa gaagaaatga aacagatgtt tgtgcagcga
300
gtaaaggaga aagaagccat attgaaagaa gctgagagag agctacaggc caaatttgag
360
caccttaaga gacttcacca agaagagaga atgaagcttg aagaacaaag aagacttttg
420
gaagaagaaa taattgcttt ctctaaaaag aaagctacct ccgagatatt tcacagccag
480
tcctttctgg caacaggcag caacctgagt aaggacaagg accataagaa ctccaatttt
540
ttgtaaaaa gaagtccag agcacagaag gtcacatca caagcaaact ttattaaaaa
600
aaaactagaa gtgtgctttg attttgctgt tatttgtttt atcacttcta tatttggtga
660
acagccacag ttactgatat ttatggaaaa gtactttcaa gtacaaggtc aatacataag
720
ccagagtga tgatactaca agttgagcat ctctaattca aaaatctgaa atccagaagc
780
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960
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1020
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1080
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1140
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1200
gaaccattata atatcgtggc tatctgatta catttatatt ccaagatgaa ctttttttta
1260
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1320
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1620

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 1680
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 2340
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 2400
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 2460
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 2570

<210> 3218

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3218

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Glu	Asn	His	Cys	Asp	Phe	Val	Lys	Leu	Arg	Glu	Met	Leu	Ile	Cys	Thr
		20						25					30		
Asn	Met	Glu	Asp	Leu	Arg	Glu	Gln	Thr	His	Thr	Arg	His	Tyr	Glu	Leu
		35				40						45			
Tyr	Arg	Arg	Cys	Lys	Leu	Glu	Met	Gly	Phe	Thr	Asp	Val	Gly	Pro	
	50				55				60						
Glu	Asn	Lys	Pro	Val	Ser	Val	Gln	Glu	Thr	Tyr	Glu	Ala	Lys	Arg	His
65				70				75					80		
Glu	Phe	His	Gly	Glu	Arg	Gln	Arg	Lys	Glu	Glu	Met	Lys	Gln	Met	
			85			90							95		
Phe	Val	Gln	Arg	Val	Lys	Glu	Lys	Glu	Ala	Ile	Leu	Lys	Glu	Ala	Glu
		100				105						110			
Arg	Glu	Leu	Gln	Ala	Lys	Phe	Glu	His	Leu	Lys	Arg	Leu	His	Gln	Glu

	115		120		125
Glu	Arg	Met	Lys	Leu	Glu
	130		135		140
Ile	Ala	Phe	Ser	Lys	Lys
	145		150		155
Ser	Phe	Leu	Ala	Thr	Gly
			165		170
Asn	Ser	Asn	Phe	Leu	
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<210> 3219

<211> 1241

<212> DNA

<213> Homo sapiens

<400> 3219

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 480
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<210> 3220

<211> 413

<212> PRT

<213> Homo sapiens

<400> 3220

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			20				25						30		
Val	Asn	Gly	Gly	Xaa	Val	Thr	Ser	Glu	Arg	Glu	Thr	Asp	Ile	Leu	Asp
			35				40					45			
Asp	Glu	Leu	Pro	Asn	Gln	Asp	Gly	His	Ser	Ala	Gly	Ser	Met	Gly	Thr
	50					55					60				
Leu	Ser	Ser	Leu	Asp	Gly	Val	Thr	Asn	Ile	Ser	Glu	Gly	Gly	Tyr	Pro
65				70					75					80	
Glu	Ala	Leu	Ser	Pro	Leu	Thr	Asn	Gly	Leu	Asp	Lys	Ser	Tyr	Pro	Met
				85					90					95	
Glu	Pro	Met	Val	Asn	Gly	Gly	Gly	Tyr	Pro	Tyr	Glu	Ser	Ala	Ser	Arg
			100					105					110		
Ala	Gly	Pro	Ala	His	Ala	Gly	His	Thr	Ala	Pro	Met	Arg	Pro	Ser	Tyr
			115				120					125			
Ser	Ala	Gln	Glu	Gly	Leu	Ala	Gly	Tyr	Gln	Arg	Glu	Gly	Pro	His	Pro
	130					135					140				
Ala	Trp	Pro	Gln	Pro	Val	Thr	Thr	Ser	His	Tyr	Ala	His	Asp	Pro	Ser
145					150					155				160	
Gly	Met	Phe	Arg	Ser	Gln	Ser	Phe	Ser	Glu	Ala	Glu	Pro	Gln	Leu	Pro
				165					170					175	
Pro	Ala	Pro	Val	Arg	Gly	Gly	Ser	Ser	Arg	Glu	Ala	Val	Gln	Arg	Gly
			180					185					190		
Leu	Asn	Ser	Trp	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Pro	Arg	Pro
		195					200						205		
Pro	Pro	Arg	Gln	Gln	Glu	Arg	Ala	His	Leu	Glu	Ser	Leu	Val	Ala	Ser
	210					215					220				
Arg	Pro	Ser	Pro	Gln	Pro	Leu	Ala	Glu	Thr	Pro	Ile	Pro	Ser	Leu	Pro
				230						235				240	
Glu	Phe	Pro	Arg	Ala	Ala	Ser	Gln	Gln	Glu	Ile	Glu	Gln	Ser	Ile	Glu
				245					250					255	
Thr	Leu	Asn	Met	Leu	Met	Leu	Asp	Leu	Glu	Pro	Ala	Ser	Ala	Ala	Ala
			260				265					270			
Pro	Leu	His	Lys	Ser	Gln	Ser	Val	Pro	Gly	Ala	Trp	Pro	Gly	Ala	Ser
		275					280					285			
Pro	Leu	Ser	Ser	Gln	Pro	Leu	Ser	Gly	Ser	Ser	Arg	Gln	Ser	His	Pro
					295						300				
Leu	Thr	Gln	Ser	Arg	Ser	Gly	Tyr	Ile	Pro	Ser	Gly	His	Ser	Leu	Gly
305					310					315				320	
Thr	Pro	Glu	Pro	Ala	Pro	Arg	Ala	Ser	Leu	Glu	Ser	Val	Pro	Pro	Gly
				325				330						335	
Arg	Ser	Tyr	Ser	Pro	Tyr	Asp	Tyr	Gln	Pro	Cys	Leu	Ala	Gly	Pro	Asn

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          340          345          350
Gln Asp Phe His Ser Lys Ser Pro Ala Ser Ser Ser Leu Pro Ala Phe
          355          360          365
Leu Pro Thr Thr His Ser Pro Pro Gly Pro Gln Gln Pro Pro Ala Ser
          370          375          380
Leu Pro Gly Leu Thr Ala Gln Pro Leu Leu Ser Pro Lys Glu Ala Thr
          385          390          395          400
Ser Asp Pro Ser Arg Thr Pro Glu Glu Glu Pro Leu Asn
          405          410

<210> 3221
<211> 1585
<212> DNA
<213> Homo sapiens

<400> 3221
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120
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180
tttgaggctc tgtgtctcgc gccgcgcccc ggggcccgcct ctaacttgag ctatcgcgcg
240
cccttcacgc tgcacagcgc cgctctggac ttcagtcac ctgggaccga ggtgagtgcg
300
ctctgcccgg gacagctccc gatctcagtt acttgcatcg cggacgaaat cggcgctcgc
360
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420
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480
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540
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ccgcagagaa catggccaat cagggtcgac gagaagctgg gagagacacc acttgtccct
660
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720
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840
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900
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960
aaggagtcta tgggccccc gccgtgtgat gagtgatect gagcccgtg ctttgggctc
1020
cagtttgcat attgcacaaa caatgggggt aaagtcgggg actgtgatct gcgggacaga
1080
gcagaggggt ccttgctcgc gagtcccggt ctttgggctc tagtgatgca tagggaaaca
1140

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 1260
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 1320
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 1380
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 1440
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 1560
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<210> 3222

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3222

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Trp	Val	Glu	Glu	Pro	Gln	Arg	Ser	Cys	Thr	Ala	Arg	Arg	Trp	His	Ile
			20					25					30		
Gln	Ala	Thr	Gly	Gly	Val	Glu	Pro	Ala	Gly	Trp	Lys	Glu	Met	Arg	Cys
			35					40			45				
His	Leu	Arg	Ala	Asn	Gly	Tyr	Leu	Cys	Lys	Tyr	Gln	Phe	Glu	Val	Leu
	50				55						60				
Cys	Pro	Ala	Pro	Arg	Pro	Gly	Ala	Ala	Ser	Asn	Leu	Ser	Tyr	Arg	Ala
	65				70				75					80	
Pro	Phe	Gln	Leu	His	Ser	Ala	Ala	Leu	Asp	Phe	Ser	Pro	Pro	Gly	Thr
			85						90					95	
Glu	Val	Ser	Ala	Leu	Cys	Arg	Gly	Gln	Leu	Pro	Ile	Ser	Val	Thr	Cys
			100				105						110		
Ile	Ala	Asp	Glu	Ile	Gly	Ala	Arg	Trp	Asp	Lys	Leu	Ser	Gly	Asp	Val
	115						120				125				
Leu	Cys	Pro	Cys	Pro	Gly	Arg	Tyr	Leu	Arg	Ala	Gly	Lys	Cys	Ala	Glu
	130				135					140					
Leu	Pro	Asn	Cys	Leu	Asp	Asp	Leu	Gly	Gly	Phe	Ala	Cys	Glu	Cys	Ala
	145				150					155				160	
Thr	Gly	Phe	Glu	Leu	Gly	Lys	Asp	Gly	Arg	Ser	Cys	Val	Thr	Ser	Gly
			165					170						175	
Glu	Gly	Gln	Pro	Thr	Leu	Gly	Gly	Thr	Gly	Val	Pro	Thr	Arg	Arg	Pro
			180					185					190		
Pro	Ala	Thr	Ala	Thr	Ser	Pro	Val	Pro	Gln	Arg	Thr	Trp	Pro	Ile	Arg
	195						200					205			
Val	Asp	Glu	Lys	Leu	Gly	Glu	Thr	Pro	Leu	Val	Pro	Glu	Gln	Asp	Asn
	210				215						220				
Ser	Val	Thr	Ser	Ile	Pro	Glu	Ile	Pro	Arg	Trp	Gly	Ser	Gln	Ser	Thr
	225				230				235					240	
Met	Ser	Thr	Leu	Gln	Met	Ser	Leu	Gln	Ala	Glu	Ser	Lys	Ala	Thr	Ile

245										250					255				
Thr	Pro	Ser	Gly	Ser	Val	Ile	Ser	Lys	Phe	Asn	Ser	Thr	Thr	Ser	Ser				
260										265					270				
Ala	Thr	Pro	Gln	Ala	Phe	Asp	Ser	Ser	Ser	Ala	Val	Val	Phe	Ile	Phe				
275										280					285				
Val	Ser	Thr	Ala	Val	Val	Val	Leu	Val	Ile	Leu	Thr	Met	Thr	Val	Leu				
290										295					300				
Gly	Leu	Val	Lys	Leu	Cys	Phe	His	Glu	Ser	Pro	Ser	Ser	Gln	Pro	Arg				
305										310					315				
Lys	Glu	Ser	Met	Gly	Pro	Pro	Gly	Cys	Asp	Glu									
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<210> 3223

<211> 985

<212> DNA

<213> Homo sapiens

<400> 3223

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180	gaagcttcga	ggaggtacaa	gaaagtcatt	ccaggagctg	agccccctcat	ctgcgcctcc
240	agcctgctgt	ccacagcccc	ctgcctctac	ctggctctctg	tcctggcccc	gaccacccctg
300	ctggcctcct	atgtgttcct	gggccttggg	gagctgtcttc	tgtcctgcaa	ctgggcagtg
360	gtttccgcga	tcctgctgtc	tgtgggtggtg	cccagatgcc	gggggacggc	agaggcactt
420	cagatcacgg	tggggccacat	cctggggagac	gctgggacgc	cctatctcac	aggacttacc
480	tcctagtgtcc	tgcggccagg	cgccctgact	cctctgcagc	gcttccgcag	cctgcagcag
540	agcttcctgt	gctgcgcctt	tgtcatcgcc	ctggggggcg	gctgcttctct	gctgactcgg
600	ctgtacacctg	agagagacga	gacccggggc	tggcagcctg	tcacagggac	cccagacagc
660	aatgatgttg	acagcaacga	cctggagaga	caaggcctac	tttcggggcg	tggcgccctc
720	acagaggagc	cctgagggtcc	ctgcctacac	togtccctgcc	tgaagcctc	ccttgggtcc
780	ccacagcagc	agtgcctcgg	ttcctctttg	gctgtcctcg	gggactccgg	ctgaggcaca
840	tctgccactt	ttgaattccc	ggctgggagag	ctggcaggac	cctgtggctg	ggctggggaat
900	ggaagctgtca	gcactctgcg	tgggaggcct	gggcctgtgc	ctgcatcccg	ctcaaggctg
960	ccccagcctg	gggtccccag	cctggctgct	gctgggccct	gaataaagag	aggccagtac
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<210> 3224

<211> 224

<212> PRT

<213> Homo sapiens

<400> 3224

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 20           25           30
Val Ile Gly Val Ile Leu Gly Ala Glu Ala Ser Arg Arg Tyr Lys Lys
 35           40           45
Val Ile Pro Gly Ala Glu Pro Leu Ile Cys Ala Ser Ser Leu Leu Ala
 50           55           60
Thr Ala Pro Cys Leu Tyr Leu Ala Leu Val Leu Ala Pro Thr Thr Leu
 65           70           75           80
Leu Ala Ser Tyr Val Phe Leu Gly Leu Gly Glu Leu Leu Leu Ser Cys
 85           90           95
Asn Trp Ala Val Val Ala Asp Ile Leu Leu Ser Val Val Val Pro Arg
100           105           110
Cys Arg Gly Thr Ala Glu Ala Leu Gln Ile Thr Val Gly His Ile Leu
115           120           125
Gly Asp Ala Gly Ser Pro Tyr Leu Thr Gly Leu Ile Ser Ser Val Leu
130           135           140
Arg Pro Gly Ala Leu Thr Pro Leu Gln Arg Phe Arg Ser Leu Gln Gln
145           150           155           160
Ser Phe Leu Cys Cys Ala Phe Val Ile Ala Leu Gly Gly Gly Cys Phe
165           170           175
Leu Leu Thr Ala Leu Tyr Leu Glu Arg Asp Glu Thr Arg Ala Trp Gln
180           185           190
Pro Val Thr Gly Thr Pro Asp Ser Asn Asp Val Asp Ser Asn Asp Leu
195           200           205
Glu Arg Gln Gly Leu Leu Ser Gly Ala Gly Ala Ser Thr Glu Glu Pro
210           215           220

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<210> 3225

<211> 506

<212> DNA

<213> Homo sapiens

<400> 3225

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300
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360
accacaccgc ctttgaggtg agccacccaa gatgcagggt gggctgtatg aaactccacg
420

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<210> 3226

<211> 137

<212> PRT

<213> Homo sapiens

<400> 3226

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Leu	Arg	Pro	Cys	Thr	Phe	Phe	Ile	Gln	Glu	Ala	Thr	Lys	Asn	Ser	Ala
			20					25				30			
Cys	Phe	Pro	Val	Pro	Lys	Met	Pro	Val	Pro	Cys	Ala	Leu	Gly	Glu	Glu
			35			40					45				
Leu	Val	Pro	Cys	His	Arg	Gly	Thr	Gly	Pro	Ala	Val	Val	Trp	Pro	Ala
	50					55				60					
Gln	Pro	Gln	Gln	Gly	Glu	Val	Glu	Pro	Gln	Pro	Gln	Pro	Thr	Gln	Arg
65				70					75				80		
Met	Glu	Pro	Pro	Ser	Ala	Ala	Lys	Asn	Asn	His	Thr	Ala	Phe	Glu	Val
				85				90					95		
Ser	His	Pro	Arg	Cys	Arg	Trp	Gly	Cys	Met	Lys	Leu	His	Glu	His	Gly
			100					105				110			
Met	Ser	Phe	Ile	Phe	Arg	Val	Pro	Arg	Gly	His	Glu	Trp	Tyr	Gln	Asp
		115				120						125			
Pro	Trp	Arg	Cys	Pro	Trp	Phe	Pro	Met							
	130					135									

<210> 3227

<211> 1623

<212> DNA

<213> Homo sapiens

<400> 3227

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 120
 gtgtttcctt ccgcaccaggc aagtgccctt agaaaccggg cccgcctccc ttcctggcct
 180
 gcattcccat cccctctccc gggcgaggagg tgaggacctc cttggttctct ttggttctgt
 240
 cagtgcagccc cttccttgcc catgaagctc gtgaggaaga acatcgagaa ggacaatgcy
 300
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 360
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 420
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 480
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 540

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 660
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 780
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 1620
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 1623

<210> 3228

<211> 385

<212> PRT

<213> Homo sapiens

<400> 3228

Met	Lys	Leu	Val	Arg	Lys	Asn	Ile	Glu	Lys	Asp	Asn	Ala	Gly	Gln	Val
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Thr	Leu	Val	Pro	Glu	Glu	Pro	Glu	Asp	Met	Trp	His	Thr	Tyr	Asn	Leu
			20					25					30		
Val	Gln	Val	Gly	Asp	Ser	Leu	Arg	Ala	Ser	Thr	Ile	Arg	Lys	Val	Gln
		35				40					45				
Thr	Glu	Ser	Ser	Thr	Gly	Ser	Val	Gly	Ser	Asn	Arg	Val	Arg	Thr	Thr
	50				55				60						
Leu	Thr	Leu	Cys	Val	Glu	Ala	Ile	Asp	Phe	Asp	Ser	Gln	Ala	Cys	Gln

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65              70              75              80
Leu Arg Val Lys Gly Thr Asn Ile Gln Glu Asn Glu Tyr Val Lys Met
85              90              95
Gly Ala Tyr His Thr Ile Glu Leu Glu Pro Asn Arg Gln Phe Thr Leu
100             105             110
Ala Lys Lys Gln Trp Asp Ser Val Val Leu Glu Arg Ile Glu Gln Ala
115             120             125
Cys Asp Pro Ala Trp Ser Ala Asp Val Ala Val Val Met Gln Glu
130             135             140
Gly Leu Ala His Ile Cys Leu Val Thr Pro Ser Met Thr Leu Thr Arg
145             150             155             160
Ala Lys Val Glu Val Asn Ile Pro Arg Lys Arg Lys Gly Asn Cys Ser
165             170             175
Gln His Asp Arg Ala Leu Glu Arg Phe Tyr Glu Gln Val Val Gln Ala
180             185             190
Ile Gln Arg His Ile His Phe Asp Val Val Lys Cys Ile Leu Val Ala
195             200             205
Ser Pro Gly Phe Val Arg Glu Gln Phe Cys Asp Tyr Met Phe Gln Gln
210             215             220
Ala Val Lys Thr Asp Asn Lys Leu Leu Leu Glu Asn Arg Ser Lys Phe
225             230             235             240
Leu Gln Val His Ala Ser Ser Gly His Lys Tyr Ser Leu Lys Glu Ala
245             250             255
Leu Cys Asp Pro Thr Val Ala Ser Arg Leu Ser Asp Thr Lys Ala Ala
260             265             270
Gly Glu Val Lys Ala Leu Asp Asp Phe Tyr Lys Met Leu Gln His Glu
275             280             285
Pro Asp Arg Ala Phe Tyr Gly Leu Lys Gln Val Glu Lys Ala Asn Glu
290             295             300
Ala Met Ala Ile Asp Thr Leu Leu Ile Ser Asp Glu Leu Phe Arg His
305             310             315             320
Gln Asp Val Ala Thr Arg Ser Arg Tyr Val Arg Leu Val Asp Ser Val
325             330             335
Lys Glu Asn Ala Gly Thr Val Arg Ile Phe Ser Ser Leu His Val Ser
340             345             350
Gly Glu Gln Leu Ser Gln Leu Thr Gly Val Ala Ala Ile Leu Arg Phe
355             360             365
Pro Val Pro Glu Leu Ser Asp Gln Glu Gly Asp Ser Ser Ser Glu Glu
370             375             380

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Asp
385

<210> 3229
<211> 1008
<212> DNA
<213> Homo sapiens

<400> 3229
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60
cctgcactgg gcgcgcgaga gctgctaggg cggtttctct gcttcgggcc tgttgggag
120
ggccggctaa ggtgcgcgtg ctgcgtggtt ctaacccttc tgttgggcgt ttctgctgag
180

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aggcgggagg cgctgagagt ctgtgaggag gtccgtggac agactgcttt gctcgttgtt
240
gctcttcgga ggcgcgatc cccgaaggcg agctgaaata cggtgcagg ctacaatttg
300
cagccgacca ttatggaaga cggaagcgg gagaggtggc ccacctcat ggagcgcttg
360
tgctcgatg gttcgcatt tcccaatac ccattaaac cgtatcatct gaagaggatc
420
cacagagctg tcttactggg taatctggag gaactgaagt acctctctgt cacgtattat
480
gacatcaata agagagacag gaaggaaagg accgcctac atttggcctg tgccactggc
540
caaccggaaa tggtagatct cctggtgtcc agaagatgtg agcttaacct ctgcgaccgt
600
gaagacagga cactctgat caagcgtgta caactgaggc aggaggcttg tgcaactctt
660
ctgctgcaaa atggcgccga tccaaatatt acggatgtct ttggaaggac tgctctgcac
720
tacgctgtgt ataatgaaga tacatccatg atagaaaaac ttctttcaca tggtagaaat
780
attgaagaat gcagcaagaa tgaatatcag ccaactgttac ttgctgtgag tcgaagaaaa
840
gtgaaaatgg tggatttttt attaaagaaa aaagcaaatg taaatgccat tgattatctt
900
ggcagatcag cctcatact tgctgttact ctggagaaaa aagatatagt cattctcttt
960
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1008

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<210> 3230

<211> 232

<212> PRT

<213> Homo sapiens

<400> 3230

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Met Glu Asp Gly Lys Arg Glu Arg Trp Pro Thr Leu Met Glu Arg Leu
1      5      10      15
Cys Ser Asp Gly Phe Ala Phe Pro Gln Tyr Pro Ile Lys Pro Tyr His
20     25     30
Leu Lys Arg Ile His Arg Ala Val Leu Arg Gly Asn Leu Glu Glu Leu
35     40     45
Lys Tyr Leu Leu Leu Thr Tyr Tyr Asp Ile Asn Lys Arg Asp Arg Lys
50     55     60
Glu Arg Thr Ala Leu His Leu Ala Cys Ala Thr Gly Gln Pro Glu Met
65     70     75     80
Val His Leu Leu Val Ser Arg Arg Cys Glu Leu Asn Leu Cys Asp Arg
85     90     95
Glu Asp Arg Thr Pro Leu Ile Lys Ala Val Gln Leu Arg Gln Glu Ala
100    105    110
Cys Ala Thr Leu Leu Leu Gln Asn Gly Ala Asp Pro Asn Ile Thr Asp
115    120    125
Val Phe Gly Arg Thr Ala Leu His Tyr Ala Val Tyr Asn Glu Asp Thr
130    135    140
Ser Met Ile Glu Lys Leu Leu Ser His Gly Thr Asn Ile Glu Glu Cys

```

145		150		155		160
Ser	Lys	Asn	Glu	Tyr	Gln	Pro
		165			170	
Val	Lys	Met	Val	Glu	Phe	Leu
		180			185	
Ile	Asp	Tyr	Leu	Gly	Arg	Ser
		195			200	
Glu	Lys	Asp	Ile	Val	Ile	Leu
		210			215	
Ser	Arg	Asp	Val	Tyr	Gly	Lys
225					230	

<210> 3231

<211> 1367

<212> DNA

<213> Homo sapiens

<400> 3231

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nnacgcgtga aggggaagtt tcgcctcaga aggcgcctc gctggtccga attcggtggc
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gccacgtccg cccgtctccg cctcttgcac cgcggcttcg gcggcttcca cctagacacc
120
taacagtgcg ggagccggcc gcgtcgtgag ggggtcggca cggggagtgc ggcggtcttg
180
tgcatcttgg ctacctgtgg gtccaagatg tcggacatcg gagactggtt caggagcatc
240
ccggcgatca cgcgtctatt gtctgcgcgc accgtgcgcg tgccccttggc cggcaaacctc
300
ggcctcatca gcccgcccta cctcttcctc tggccgaag ccttccttta tcgctttcag
360
atttggagge caatcactgc caccttttat ttccctgtgg gtccaggaac tggatttctt
420
tatttggcca atttatattt cttatatcag tattctacgc gacttgaac aggagctttt
480
gatgggagge cagcagacta ttattcatg ctctcttcta actggatttg catcgtgatt
540
actggccttag caatggatat gcagttgctg atgattcctc tgatcatgtc agtactttat
600
gtctgggccc agctgaacag agacatgatt gtatcatttt ggtttggaac acgatttaag
660
gctcgtattt taccctgggt tacccttgga ttcaactata tcacggagg ctcggtaatac
720
aatgagctta ttggaatctt ggttgacatc ctttattttt tcctaattgt cagataccca
780
atggacttgg gaggaagaaa tttctatccc acacctcagt ttttgtaccg ctggctgccc
840
agtaggagag gaggagtatc aggatttggg gtgccccctg ctacgatgag gcgagctgct
900
gatcagaatg gcggaggcgg gagacacaac tggggccagg gctttcgact tggagaccag
960
tgaagggggc gcctcgggca gccgtctctc tcaagccaca tttctcccca gtgctgggtg
1020
cacttaacaa ctgcgttctg gctaacactg ttggacctga ccacactga atgtagtctt
1080

```

tcagtagcag acaaagtctt ttaaatcccg aagaaaaata taagtgttcc acaagtcttca
 1140
 cgattctcat tcaagtcctt actgctgtga agaacaaata ccaactgtgc aaattgcгаа
 1200
 actgactaca ttttttggtg tttttttttt tcccccttcc gttctgaata atgggttttta
 1260
 gcgggtccta gtctgtggc attgagctgg ggctgggtca ccaaaccctt cccaaaagga
 1320
 cccttatctc tttcttgac acatgctctc ctccccctt cagcgcg
 1367

<210> 3232

<211> 251

<212> FRT

<213> Homo sapiens

<400> 3232

Met	Ser	Asp	Ile	Gly	Asp	Trp	Phe	Arg	Ser	Ile	Pro	Ala	Ile	Thr	Arg
1			5						10					15	
Tyr	Trp	Phe	Ala	Ala	Thr	Val	Ala	Val	Pro	Leu	Val	Gly	Lys	Leu	Gly
			20					25					30		
Leu	Ile	Ser	Pro	Ala	Tyr	Leu	Phe	Leu	Trp	Pro	Glu	Ala	Phe	Leu	Tyr
		35					40					45			
Arg	Phe	Gln	Ile	Trp	Arg	Pro	Ile	Thr	Ala	Thr	Phe	Tyr	Phe	Pro	Val
		50				55				60					
Gly	Pro	Gly	Thr	Gly	Phe	Leu	Tyr	Leu	Val	Asn	Leu	Tyr	Phe	Leu	Tyr
65					70					75				80	
Gln	Tyr	Ser	Thr	Arg	Leu	Glu	Thr	Gly	Ala	Phe	Asp	Gly	Arg	Pro	Ala
			85					90						95	
Asp	Tyr	Leu	Phe	Met	Leu	Leu	Phe	Asn	Trp	Ile	Cys	Ile	Val	Ile	Thr
			100					105					110		
Gly	Leu	Ala	Met	Asp	Met	Gln	Leu	Leu	Met	Ile	Pro	Leu	Ile	Met	Ser
		115					120					125			
Val	Leu	Tyr	Val	Trp	Ala	Gln	Leu	Asn	Arg	Asp	Met	Ile	Val	Ser	Phe
		130				135					140				
Trp	Phe	Gly	Thr	Arg	Phe	Lys	Ala	Cys	Tyr	Leu	Pro	Trp	Val	Ile	Leu
145					150					155				160	
Gly	Phe	Asn	Tyr	Ile	Ile	Gly	Gly	Ser	Val	Ile	Asn	Glu	Leu	Ile	Gly
			165					170					175		
Asn	Leu	Val	Gly	His	Leu	Tyr	Phe	Phe	Leu	Met	Phe	Arg	Tyr	Pro	Met
			180					185					190		
Asp	Leu	Gly	Gly	Arg	Asn	Phe	Leu	Ser	Thr	Pro	Gln	Phe	Leu	Tyr	Arg
		195				200						205			
Trp	Leu	Pro	Ser	Arg	Arg	Gly	Gly	Val	Ser	Gly	Phe	Gly	Val	Pro	Pro
		210				215					220				
Ala	Ser	Met	Arg	Arg	Ala	Ala	Asp	Gln	Asn	Gly	Gly	Gly	Gly	Arg	His
225					230					235					240
Asn	Trp	Gly	Gln	Gly	Phe	Arg	Leu	Gly	Asp	Gln					
			245						250						

<210> 3233

<211> 975

<212> DNA

<213> Homo sapiens

```

<400> 3233
naccggtacg tgggtggagct ctgcgtgttt actatttttg gaaatgaaga aaatggaaag
60
accgttgttt accttgtggc ttcccatctg ttctttgtta tgtttgtatg gtcctattgg
120
atgacaattt tcacatctcc cgcttccccc tccaagaggt tctacttgtc caattctgaa
180
aagggaagctt atgaaaaaga attcagccaa gaaagacaac aagaaatttt gagaagagca
240
gcaagagctt tacctatcta taccacatca gcttcaaaaa ctatcagata ttgtgaaaaa
300
tgtcagctga ttaaacctga tcgggcgcat cactgctcag cctgtgactc atgtattctt
360
aagatggatc atccctgtcc ttgggtgaat aactgtgtgg gattttctaa ttacaaattc
420
ttcctgctgt ttttattgta ttccctatta tattgccttt tcgtggccgc acagttttag
480
agtacttaaa aaattttgga cgaagaacc gaccaaacc cgggccaaaa ttccacgtac
540
ttttttcttt tctttgtgtc tgcaatgttc ttcacagcg tcctctcact ttacagctac
600
cactgctggc tttaaacagc attgtccaca gctccgctg cagggtcagg gcattggcctc
660
tctccgtgtt cctgtgaaga gccttcattg gaatcatccc gggacatata gcttgaatgt
720
gctgtctggc tagccctccc acaagtcggt cactctgcac aaggaatccg agagctcatc
780
aaggatcagc acggtctggg gccaggtgg ggtggaacac gcacgggtcca caagcaattc
840
tgtctttctc aaggcttttt cttgtgcagt atgaaatcct tcataattca tatgaagtat
900
gtgcctcttg gggcactgag ctcaggaact ccaaaaagac ccttcggggc cggatccggg
960
cttcaaggct gcccc
975

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<210> 3234

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3234

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Xaa Ala Tyr Val Val Glu Leu Cys Val Phe Thr Ile Phe Gly Asn Glu
1          5          10          15
Glu Asn Gly Lys Thr Val Val Tyr Leu Val Ala Phe His Leu Phe Phe
20          25          30
Val Met Phe Val Trp Ser Tyr Trp Met Thr Ile Phe Thr Ser Pro Ala
35          40          45
Ser Pro Ser Lys Glu Phe Tyr Leu Ser Asn Ser Glu Lys Glu Arg Tyr
50          55          60
Glu Lys Glu Phe Ser Gln Glu Arg Gln Gln Glu Ile Leu Arg Arg Ala
65          70          75          80
Ala Arg Ala Leu Pro Ile Tyr Thr Thr Ser Ala Ser Lys Thr Ile Arg

```


	85		90		95
Tyr Cys Glu Lys Cys Gln Leu Ile Lys Pro Asp Arg Ala His His Cys					
	100		105		110
Ser Ala Cys Asp Ser Cys Ile Leu Lys Met Asp His Pro Cys Pro Trp					
	115		120		125
Val Asn Asn Cys Val Gly Phe Ser Asn Tyr Lys Phe Phe Leu Leu Phe					
	130		135		140
Leu Leu Tyr Ser Leu Leu Tyr Cys Leu Phe Val Ala Ala Gln Phe					
145	150		155		

<210> 3235

<211> 551

<212> DNA

<213> Homo sapiens

<400> 3235

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ntggaaactg agcttcaaac atataagcat tctcgtcagg ggctagatga aatgtacaat
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gaagccagaa ggagccttcg agatgaatct cagttacgac aggatgtaga gaatgaagcta
120
gcagtacaag ttagtatgaa gcatgagatt gaacttgcca tgaagtgtgt ggagaaaagat
180
atccatgaga aacaagatag tctgataggc ctctgacaac aactagagga agttaaaggca
240
attaacatag agatgtatca aaagttgcag ggttctgaag atggccttgaa agaaaaaaat
300
gaaataattg ccgactaga gaaaaaaacc aataaaaatta ctgcagccat gaggcagctg
360
gaacaaagat tgacgaagc agagaaggcg caaatggaag ctgaagatga ggatgagaaa
420
tatctacaag aatgtctcag taaatctgat agtctgcaga acaaatcttc ccaaaaggag
480
aaacagctgg tgcaactgga aactgacttg aagattgaga aggaatggag gcagactttg
540
caggaagatc t
551

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<210> 3236

<211> 183

<212> PRT

<213> Homo sapiens

<400> 3236

Xaa Glu Thr Glu Leu Gln Thr Tyr Lys His Ser Arg Gln Gly Leu Asp					
1	5		10		15
Glu Met Tyr Asn Glu Ala Arg Arg Gln Leu Arg Asp Glu Ser Gln Leu					
	20		25		30
Arg Gln Asp Val Glu Asn Glu Leu Ala Val Gln Val Ser Met Lys His					
	35		40		45
Glu Ile Glu Leu Ala Met Lys Leu Leu Glu Lys Asp Ile His Glu Lys					
	50		55		60
Gln Asp Thr Leu Ile Gly Leu Arg Gln Gln Leu Glu Glu Val Lys Ala					
65	70		75		80
Ile Asn Ile Glu Met Tyr Gln Lys Leu Gln Gly Ser Glu Asp Gly Leu					

	85		90		95										
Lys	Glu	Lys	Asn	Glu	Ile	Ile	Ala	Arg	Leu	Glu	Glu	Lys	Thr	Asn	Lys
	100		105		110										
Ile	Thr	Ala	Ala	Met	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Gln	Ala	Glu
	115		120		125										
Lys	Ala	Gln	Met	Glu	Ala	Glu	Asp	Glu	Lys	Tyr	Leu	Gln	Glu		
	130		135		140										
Cys	Leu	Ser	Lys	Ser	Asp	Ser	Leu	Gln	Lys	Gln	Ile	Ser	Gln	Lys	Glu
	145		150		155									160	
Lys	Gln	Leu	Val	Gln	Leu	Glu	Thr	Asp	Leu	Lys	Ile	Glu	Lys	Glu	Trp
	165		170		175										
Arg	Gln	Thr	Leu	Gln	Glu	Asp									
	180														

<210> 3237
 <211> 1323
 <212> DNA
 <213> Homo sapiens

<400> 3237
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 cgggcgctgt ggaccatggc tccgcccgcg gcgcctggcc gggaccgtgt gggccgtgag
 120
 gatgaggacc gttgggaagt acggggggac cgcaaggccc ggaagccctt ggtggagaag
 180
 aagcgacgcg gcgcgatcaa cgagagtctt caggagtgc ggtcgtctgt ggcggggcgc
 240
 gaggtgcagg ccaagctgga gaacgccgaa gtgctggagc tgacgggtgcg gcgggtccag
 300
 ggtgtgtctg ggggccgggc gcgcgagcgc gacgagctgc aggcggaagc gagcgagcgc
 360
 ttcgctgccc gctacatcca gtgcatgac gaggtgcaca cgttcgtgtc cacgtgccag
 420
 gccatcgacg ctaccgtcgc tgcgagctc ctgaaccatc tgctcgagtc catgcgctgt
 480
 cgtgagggca gcagcttcca ggtctgtgct ggggacgccc tggcggggccc acctagagcc
 540
 cctggacgga gtggtgggccc tgcggggggc gctccgggat ccccaatacc cagccccccg
 600
 ggtcctgggg acgacctgtg ctccgacctg gaggaggccc ctgaggctga actgagtcag
 660
 gctcctgtg agggggcccga cttggtgccc gcagccctgg gcagcctgac cacagcccaa
 720
 attgccccga gtgtctggag gccttggtga ccaatgccag ccagagtctt gcgggggtgg
 780
 gccggccct ccttgatct cctccctct cccaggggtt cagatgtggt ggggtagggc
 840
 cctggaagtc tccaggtct tcctccctc ctctgatgga tggtctgcag ggcagccct
 900
 ggtaaccagc ccagtcaggc ccagccccc ttcttaaga aacttttagg gacctgcag
 960
 ctctggagtg ggtggaggga gggagctacg ggcaggagga agaattttgt agagctgcc
 1020

gcgctctccc aggttcaccc acccaggctt caccagccct gtgcgggctc tgggggcaga
 1080
 ggtggcagaa atggtgctgg gcactagtgt tccaggcagc cctgggctaa acaaaagctt
 1140
 gaacttgcca cttcagcggg gagatgagag gcaggtgcac tcagctgcac tgcccagagc
 1200
 tgtgatgctc tgtacatctt gttttagca cacttgagtt tgtgtattcc attgacatca
 1260
 aatgtgacaa ttttactaaa taaagaattt tggagttagt tacccttgaa aaaaaagtcg
 1320
 acg
 1323

<210> 3238

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3238

Xaa	Leu	Gly	Cys	Asp	Leu	Pro	Arg	Arg	Gly	Val	Cys	Thr	Lys	Ala	Leu
1			5						10					15	
Gly	Ala	Gly	Leu	Arg	Ala	Leu	Trp	Thr	Met	Ala	Pro	Pro	Ala	Ala	Pro
		20						25					30		
Gly	Arg	Asp	Arg	Val	Gly	Arg	Glu	Asp	Glu	Asp	Arg	Trp	Glu	Val	Arg
		35					40					45			
Gly	Asp	Arg	Lys	Ala	Arg	Lys	Pro	Leu	Val	Glu	Lys	Lys	Arg	Arg	Ala
	50					55				60					
Arg	Ile	Asn	Glu	Ser	Leu	Gln	Glu	Leu	Arg	Leu	Leu	Leu	Ala	Gly	Ala
65				70					75					80	
Glu	Val	Gln	Ala	Lys	Leu	Glu	Asn	Ala	Glu	Val	Leu	Glu	Leu	Thr	Val
			85					90						95	
Arg	Arg	Val	Gln	Gly	Val	Leu	Arg	Gly	Arg	Ala	Arg	Glu	Arg	Glu	Gln
		100						105					110		
Leu	Gln	Ala	Glu	Ala	Ser	Glu	Arg	Phe	Ala	Ala	Gly	Tyr	Ile	Gln	Cys
	115					120						125			
Met	His	Glu	Val	His	Thr	Phe	Val	Ser	Thr	Cys	Gln	Ala	Ile	Asp	Ala
	130					135					140				
Thr	Val	Ala	Ala	Glu	Leu	Leu	Asn	His	Leu	Leu	Glu	Ser	Met	Pro	Leu
145				150						155				160	
Arg	Glu	Gly	Ser	Ser	Phe	Gln	Asp	Leu	Leu	Gly	Asp	Ala	Leu	Ala	Gly
			165					170					175		
Pro	Pro	Arg	Ala	Pro	Gly	Arg	Ser	Gly	Trp	Pro	Ala	Gly	Gly	Ala	Pro
		180						185					190		
Gly	Ser	Pro	Ile	Pro	Ser	Pro	Pro	Gly	Pro	Gly	Asp	Asp	Leu	Cys	Ser
	195					200						205			
Asp	Leu	Glu	Glu	Ala	Pro	Glu	Ala	Glu	Leu	Ser	Gln	Ala	Pro	Ala	Glu
	210					215					220				
Gly	Pro	Asp	Leu	Val	Pro	Ala	Ala	Leu	Gly	Ser	Leu	Thr	Thr	Ala	Gln
	225					230				235				240	
Ile	Ala	Arg	Ser	Val	Trp	Arg	Pro	Trp							
			245												

<210> 3239

<211> 432

<212> DNA

<213> Homo sapiens

<400> 3239

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aaaaccaaag attctcctgg agttttctct aaactgggtg ttctcctgag gagagtgaca
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agaaaacttg tgagaaataa gctggcagtg attacgcgtc tccttcagaa tctgatcatg
120
ggtttgttcc tccttttctt cgttctgcgg gtccgaagca atgtgctaaa ggggtctatc
180
caggaccgcy taggtctcct ttaccagttt gtgggcgcca ccccgtagac aggcagctg
240
aacgctgtga atctgtttcc cgtgctgcga gctgtcagcg accaggagag tcaggacggc
300
ctctaccaga agtggcagat gatgctggcc tatgctactgc acgtcctccc ctccagcggt
360
gttgccacca tgattttcag cagtgtgtgc tactggacgc tgggcttaca tctgagggtt
420
gccccgattgg gt
432

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<210> 3240

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3240

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Lys Thr Lys Asp Ser Pro Gly Val Phe Ser Lys Leu Gly Val Leu Leu
1      5      10      15
Arg Arg Val Thr Arg Asn Leu Val Arg Asn Lys Leu Ala Val Ile Thr
20     25     30
Arg Leu Leu Gln Asn Leu Ile Met Gly Leu Phe Leu Leu Phe Val
35     40     45
Leu Arg Val Arg Ser Asn Val Leu Lys Gly Ala Ile Gln Asp Arg Val
50     55     60
Gly Leu Leu Tyr Gln Phe Val Gly Ala Thr Pro Tyr Thr Gly Met Leu
65     70     75     80
Asn Ala Val Asn Leu Phe Pro Val Leu Arg Ala Val Ser Asp Gln Glu
85     90     95
Ser Gln Asp Gly Leu Tyr Gln Lys Trp Gln Met Met Leu Ala Tyr Ala
100    105    110
Leu His Val Leu Pro Phe Ser Val Val Ala Thr Met Ile Phe Ser Ser
115    120    125
Val Cys Tyr Trp Thr Leu Gly Leu His Pro Glu Val Ala Arg Leu Gly
130    135    140

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<210> 3241

<211> 492

<212> DNA

<213> Homo sapiens

<400> 3241

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gtggaatttt tttagacaaa gtctcaaaaa acaaacaaac aaacaaaagg taagataaat
60

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acgaaatata aaataagagg caggaagagc ccaaagcatc agaaatgtgc cagttataat
 120
 gggcccaaat cccctcttgt gtctccagaa gtatttgaaa aatacgtag gatctgcctc
 180
 acagacatgc tcccaggaca ctgcacagca aggaggtagc gcgggcccag ccagccaagg
 240
 cagaggagga catcactgcc acagcagggg gcctgactgg cagcaaaagg gacgactccg
 300
 gcgaaaagtc agcaggaaac aggacagggg ctggaccaat ggcctccctc agccccacac
 360
 cccacccagg caggagcggg gcctggcccg gggcaggcgg gtgggagagc tcaactgagt
 420
 ggcagcagg catggcccct gatgctgcag gtaccaggc tgcagctgca gaaacctcag
 480
 tgggaaccca gg
 492

<210> 3242

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3242

Met	Gly	Gln	Asn	Pro	Leu	Leu	Cys	Leu	Gln	Lys	Tyr	Leu	Lys	Asn	Thr
1			5						10					15	
Leu	Gly	Ser	Ala	Ser	Gln	Thr	Cys	Ser	Gln	Asp	Thr	Arg	Gln	Gln	Gly
			20					25					30		
Gly	Thr	Ala	Gly	Pro	Ala	Ser	Gln	Gly	Arg	Gly	Gly	His	His	Cys	His
		35				40					45				
Ser	Arg	Gly	Pro	Asp	Trp	Gln	Gln	Lys	Gly	Arg	Leu	Arg	Arg	Lys	Val
50					55					60					
Ser	Arg	Lys	Gln	Asp	Arg	Gly	Trp	Thr	Asn	Gly	Leu	Pro	Gln	Pro	His
65				70				75					80		
Thr	Pro	Pro	Arg	Gln	Glu	Arg	Cys	Leu	Ala	Arg	Gly	Arg	Arg	Val	Gly
			85					90						95	
Glu	Leu	Thr	Glu	Trp	Ala	Ala	Gly	His	Gly	Pro					
			100					105							

<210> 3243

<211> 944

<212> DNA

<213> Homo sapiens

<400> 3243

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 ttccccaccc tttggtctgg ggcaaggagt acttacggag tgacaaaggg aaaagtctgc
 120
 tttgaggcaa aggtaaccca gaatctccca atgaaagaag gctgcacaga ggtctctctc
 180
 cttcgagttg ggtggtctgt tgatttttcc cgtccacagc ttggtgaaga tgaattctct
 240
 tacggtttcg atggacgagg actcaaggca gaaaatggac aatttgagga atttggccag
 300

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acttttgggg agaagatggt tattggctgc ttgctaatt ttgagactga agaagtagaa
360
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<210> 3244

<211> 314

<212> PRT

<213> Homo sapiens

<400> 3244

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Gly Val Thr Lys Gly Lys Val Cys Phe Glu Ala Lys Val Thr Gln Asn
35          40          45
Leu Pro Met Lys Glu Gly Cys Thr Glu Val Ser Leu Leu Arg Val Gly
50          55          60
Trp Ser Val Asp Phe Ser Arg Pro Gln Leu Gly Glu Asp Glu Phe Ser
65          70          75          80
Tyr Gly Phe Asp Gly Arg Gly Leu Lys Ala Glu Asn Gly Gln Phe Glu
85          90          95
Glu Phe Gly Gln Thr Phe Gly Glu Asn Asp Val Ile Gly Cys Phe Ala
100         105         110
Asn Phe Glu Thr Glu Glu Val Glu Leu Ser Phe Ser Lys Asn Gly Glu
115         120         125
Asp Leu Gly Val Ala Phe Trp Ile Ser Lys Asp Ser Leu Ala Asp Arg
130         135         140
Ala Leu Leu Pro His Val Leu Cys Lys Asn Cys Val Val Glu Leu Asn
145         150         155         160
Phe Gly Gln Lys Glu Glu Pro Phe Phe Pro Pro Pro Glu Glu Phe Val
165         170         175
Phe Ile His Ala Val Pro Val Glu Glu Arg Val Arg Thr Ala Val Pro
180         185         190
Pro Lys Thr Ile Glu Glu Cys Glu Val Ile Leu Met Val Gly Leu Pro

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225	230		235		240	
Arg Met Lys Gly Leu Glu Glu Pro Glu Met Asp Pro Lys Ser Arg Asp						
	245		250		255	
Leu Leu Val Gln Gln Ala Ser Gln Cys Leu Ser Lys Leu Val Gln Ile						
260		265		270		
Ala Ser Arg Thr Lys Arg Asn Phe Ile Leu Asp Gln Cys Asn Val Tyr						
275		280		285		
Asn Ser Gly Gln Arg Arg Lys Leu Leu Leu Phe Lys Thr Phe Ser Arg						
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<211> 980

<212> DNA

<213> Homo sapiens

<400> 3245

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<210> 3246

<211> 219

<212> PRT

<213> Homo sapiens

<400> 3246

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 20          25          30
Leu Ala Ser Ile Ile Ala Ala Thr Met Ala Arg Thr Val Tyr Cys Thr
 35          40          45
Asp Val Gly Ala Asp Leu Leu Ser Met Cys Gln Arg Asn Ile Ala Leu
 50          55          60
Asn Ser His Leu Ala Ala Thr Gly Gly Gly Ile Val Arg Val Lys Glu
 65          70          75          80
Leu Asp Trp Leu Lys Asp Asp Leu Cys Thr Asp Pro Lys Val Pro Phe
 85          90          95
Ser Trp Ser Gln Glu Glu Ile Ser Asp Leu Tyr Asp His Thr Thr Ile
100          105          110
Leu Phe Ala Ala Glu Val Phe Tyr Asp Asp Leu Thr Asp Ala Val
115          120          125
Phe Lys Thr Leu Ser Arg Leu Ala His Arg Leu Lys Asn Ala Cys Thr
130          135          140
Ala Ile Leu Ser Val Glu Lys Arg Leu Asn Phe Thr Leu Arg His Leu
145          150          155          160
Asp Val Thr Cys Glu Ala Tyr Asp His Phe Arg Ser Cys Leu His Ala
165          170          175
Leu Glu Gln Leu Thr Asp Gly Lys Leu Arg Phe Val Val Glu Pro Val
180          185          190
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<210> 3247

<211> 977

<212> DNA

<213> Homo sapiens

<400> 3247

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180
ccgggtgggc ccagccccgg gagccgggtg cttaccatcc tggagcagat ccccgccatg
240
gtgggtgggt ctgacaagac ctccggagtc taccagaaga cctactgggc cagctacaac
300

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<210> 3248

<211> 260

<212> PRT

<213> Homo sapiens

<400> 3248

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			20				25					30			
Trp	Ala	Asp	Ile	Phe	Lys	Arg	Phe	Asn	Ser	Gly	Thr	Tyr	Asn	Asn	Gln
		35				40					45				
Trp	Met	Ile	Val	Asp	Tyr	Lys	Ala	Phe	Ile	Pro	Gly	Gly	Pro	Ser	Pro
	50					55				60					
Gly	Ser	Arg	Val	Leu	Thr	Ile	Leu	Glu	Gln	Ile	Pro	Gly	Met	Val	Val
	65				70				75				80		
Val	Ala	Asp	Lys	Thr	Ser	Glu	Leu	Tyr	Gln	Lys	Thr	Tyr	Trp	Ala	Ser
			85					90					95		
Tyr	Asn	Ile	Pro	Ser	Phe	Glu	Thr	Val	Phe	Asn	Ala	Ser	Gly	Leu	Gln
		100					105					110			
Ala	Leu	Val	Ala	Gln	Tyr	Gly	Asp	Trp	Phe	Ser	Tyr	Asp	Gly	Ser	Pro
		115				120						125			
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	130				135				140						
Ser	Met	Val	Arg	Leu	Met	Arg	Tyr	Asn	Asp	Phe	Leu	His	Asp	Pro	Leu
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	195		200		205										
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	210		215		220										
Trp	Asp	Gln	Val	Pro	Pro	Phe	Gln	Trp	Ser	Thr	Ser	Pro	Phe	Ser	Gly
	225		230		235									240	
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<210> 3249

<211> 4487

<212> DNA

<213> Homo sapiens

<400> 3249

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<211> 849

<212> PRT

<213> Homo sapiens

<400> 3250

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			20					25					30		
Trp	Val	Pro	Thr	Asp	Cys	Phe	Ser	Leu	Ser	Leu	Ser	Pro	Pro	His	Ser
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Arg	Cys	Ser	Gly	Ala	Arg	Cys	His	Arg	Pro	Leu	Ser	Arg	Gln	Leu	Cys
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Thr	Arg	Thr	Leu	Ala	Ile	Gln	Gln	Gln	Ala	Leu	Arg	Gly	Gly	Ala	
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2452

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770	775	780
Pro Ala Ala His Ala Lys His Gly Ser Arg Asp Gly Ser Thr Gln Thr		
785	790	800
Asp Gly Pro Pro Asp Ser Thr Ser Thr Cys Leu Pro Pro Glu Pro Asp		
805	810	815
Ser Leu Leu Gly Cys Ser Ser Ser Gln Arg Ala Ala Ser Leu Asp Ser		
820	825	830
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835	840	845

Ile

<210> 3251

<211> 2595

<212> DNA

<213> Homo sapiens

<400> 3251

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 <211> 254
 <212> PRT
 <213> Homo sapiens

<400> 3252
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 35 40 45
 Leu Glu Asp Val Ser Arg Gly Gly Ser Pro Phe Ala Ile Val Ile Thr
 50 55 60
 Gln Gln His Gln Ile His Arg Ser Cys Thr Val Asn Ile Met Phe Gly
 65 70 75 80
 Thr Pro Gln Glu His Arg Asn Met Pro Gln Ala Asp Ala Met Val Leu
 85 90 95
 Val Ala Arg Asn Tyr Glu Arg Tyr Lys Asn Glu Cys Arg Glu Lys Glu
 100 105 110
 Arg Glu Glu Ile Ala Arg Gln Ala Ala Lys Met Ala Asp Glu Ala Ile
 115 120 125
 Leu Gln Glu Arg Glu Arg Gly Gly Pro Glu Glu Gly Val Arg Gly Gly
 130 135 140
 His Pro Pro Ala Ile Gln Ser Leu Ile Asn Leu Leu Ala Asp Asn Arg
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 Tyr Leu Thr Ala Glu Glu Thr Asp Lys Ile Ile Asn Tyr Leu Arg Glu
 165 170 175
 Arg Lys Glu Arg Leu Met Arg Ser Ser Thr Asp Ser Leu Pro Gly Glu
 180 185 190
 Leu Arg Gly Arg Pro Arg Pro Asp Phe Pro Pro Thr Thr Arg Gly Asp
 195 200 205
 Leu Gly Cys Leu Ala Glu Asp Thr Ala Lys Leu Pro Thr Ala Pro Glu
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 <211> 686
 <212> DNA
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<210> 3254

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3254

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 Tyr Ser Arg Val Thr Pro Gln Glu Gln Ala Lys Leu Asp Ala Gln Leu
 35 40 45
 Arg Asp Lys Glu Phe Tyr Arg Pro Ile Pro Asn Pro Asn Pro Lys Leu
 50 55 60
 Thr Asp Gly Tyr Pro Ala Phe Lys Arg Pro His Met Thr Ala Lys Asp
 65 70 75 80
 Leu Gly Leu Pro Gly Phe Phe Pro Ser Gln Glu His Glu Ala Thr Arg
 85 90 95
 Glu Asp Glu Arg Lys Phe Thr Ser Thr Cys His Phe Thr Tyr Pro Ala
 100 105 110
 Ser His Asp Leu His Leu Ala Gln Gly Asp Pro Asn Gln Val Leu Gln
 115 120 125
 Ser Ala Asp Phe Pro Cys Leu Val Asp Pro Lys His Gln Pro Ala Ala
 130 135 140
 Glu Met Ala Lys Gly Tyr Leu Leu Leu Pro Gly Cys Pro Cys Leu His
 145 150 155 160
 Cys His Ile Val Lys Val Pro Ile Leu Asn Arg Trp Gly Pro Leu Met
 165 170 175
 Pro Phe Tyr Gln
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<210> 3255

<211> 724

<212> DNA

<213> Homo sapiens

<400> 3255

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 180
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 240
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 420
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<210> 3256

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3256

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		20					25					30			
Gly	Arg	Asn	Glu	Ala	Gly	Glu	Arg	His	Gly	Arg	Gly	Arg	Ala	Arg	Leu
		35					40					45			
Pro	Asn	Gly	Asp	Thr	Tyr	Glu	Gly	Ser	Tyr	Glu	Phe	Gly	Lys	Arg	His
	50					55				60					
Gly	Gln	Gly	Ile	Tyr	Lys	Phe	Lys	Asn	Gly	Ala	Arg	Tyr	Ile	Gly	Glu
65					70				75					80	
Tyr	Val	Arg	Asn	Lys	Lys	His	Gly	Gln	Gly	Thr	Phe	Ile	Tyr	Pro	Asp
			85						90					95	
Gly	Ser	Arg	Tyr	Glu	Gly	Glu	Trp	Ala	Asn	Asp	Leu	Arg	His	Gly	His
			100					105					110		
Gly	Val	Tyr	Tyr	Tyr	Ile	Asn	Asn	Asp	Thr	Tyr	Thr	Gly	Glu	Trp	Phe
			115				120					125			
Ala	His	Gln	Arg	His	Gly	Gln	Gly	Thr	Tyr	Leu	Tyr	Ala	Glu	Thr	Gly
	130					135					140				
Ser	Lys	Tyr	Val	Gly	Thr	Trp	Val	Asn	Gly	Gln	Gln	Glu	Gly	Thr	Ala
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165

<210> 3257

<211> 368

<212> DNA

<213> Homo sapiens

<400> 3257

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240
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368

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<210> 3258

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3258

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Ser Thr Ala Thr Lys Ser Glu Thr Ser Glu Asp Ile Ser Gln Thr Ser
35      40      45
Lys Tyr Ser Pro Ile Tyr Ser Pro Asp Pro Tyr Tyr Ala Ser Glu Ser
50      55      60
Glu Tyr Trp Thr Tyr His Gly Ser Pro Lys Val Pro Arg Ala Arg Arg
65      70      75      80
Phe Ser Ser Gly Gly Glu Glu Asp Asp Phe Asp Arg Ser Met His Lys
85      90      95
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<210> 3259

<211> 747

<212> DNA

<213> Homo sapiens

<400> 3259

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<210> 3260

<211> 197

<212> PRT

<213> Homo sapiens

<400> 3260

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			20					25					30		
Gly	Ser	Glu	Val	Asp	Arg	Val	Ile	Leu	Lys	Ala	Asn	Glu	Thr	Phe	Ala
		35					40					45			
Phe	Val	Gly	Asn	Val	Thr	His	Tyr	Ala	Gln	Val	Trp	Leu	Asn	Ile	Ser
		50				55					60				
Ala	Glu	Ile	Arg	Ser	Phe	Leu	Glu	Gln	Gly	Arg	Leu	Gln	Gln	His	Leu
65					70					75				80	
Arg	Trp	Leu	Gln	Gln	Tyr	Val	Ala	Glu	Leu	Arg	Leu	His	Pro	Glu	Ala
			85					90						95	
Leu	Asn	Leu	Ser	Leu	Asp	Glu	Leu	Pro	Pro	Ala	Leu	Arg	Gln	Asp	Asn
			100					105					110		
Phe	Ser	Leu	Pro	Ser	Gly	Met	Ala	Leu	Leu	Gln	Gln	Leu	Asp	Thr	Ile
		115				120							125		
Asp	Asn	Ala	Ala	Cys	Gly	Trp	Ile	Gln	Phe	Met	Ser	Lys	Val	Ser	Val
		130				135				140					
Asp	Ile	Phe	Lys	Gly	Phe	Pro	Asp	Glu	Glu	Ser	Ile	Val	Asn	Tyr	Thr
145					150					155				160	
Leu	Asn	Gln	Ala	Tyr	Gln	Asp	Asn	Val	Thr	Val	Phe	Ala	Ser	Val	Ile
				165				170						175	
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 <211> 1323
 <212> DNA
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<210> 3262
<211> 81
<212> PRT
<213> Homo sapiens

<400> 3262
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Pro Ser Gly Arg Lys Lys Pro Glu Arg Ser Glu Asp Ala Leu Phe Ala
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<210> 3263
<211> 1128
<212> DNA
<213> Homo sapiens

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<210> 3264

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3264

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		20					25					30		Ser
Ser	Ser	Asp	Ser	Glu	Pro	Glu	Ala	Glu	Leu	Glu	Arg	Glu	Ala	Lys
		35				40					45			Lys
Ser	Ala	Lys	Lys	Pro	Gln	Ser	Ser	Ser	Thr	Glu	Pro	Ala	Arg	Lys
	50				55					60				Pro
Gly	Gln	Lys	Glu	Lys	Arg	Val	Arg	Pro	Glu	Glu	Lys	Gln	Gln	Ala
65				70					75				80	Lys
Pro	Val	Lys	Val	Glu	Arg	Thr	Arg	Lys	Arg	Ser	Glu	Gly	Phe	Ser
		85						90					95	Met
Asp	Arg	Lys	Val	Glu	Lys	Lys	Lys	Glu	Pro	Ser	Val	Glu	Glu	Lys
		100					105					110		Leu
Gln	Lys	Leu	His	Ser	Glu	Ile	Lys	Phe	Ala	Leu	Lys	Val	Asp	Ser
	115				120						125			Pro
Asp	Val	Lys	Gly	Cys	Leu	Asn	Ala	Leu	Glu	Glu	Leu	Gly	Thr	Leu
	130				135					140				Gln
Val	Thr	Ser	Gln	Ile	Leu	Gln	Lys	Asn	Thr	Asp	Val	Val	Ala	Thr
145				150					155					Leu
Lys	Lys	Ile	Arg	Arg	Tyr	Lys	Ala	Asn	Lys	Asp	Val	Met	Glu	Lys
		165						170				175		Ala
Ala	Glu	Val	Tyr	Thr	Arg	Leu	Lys	Ser	Arg	Val	Leu	Gly	Pro	Lys
	180				185							190		Ile
Glu	Ala	Val	Gln	Lys	Val	Asn	Lys	Ala	Gly	Met	Glu	Lys	Glu	Lys
	195				200						205			Ala
Glu	Glu	Lys	Leu	Ala	Gly	Glu	Glu	Leu	Ala	Gly	Glu	Glu	Ala	Pro
	210				215					220				Gln
Glu	Lys	Ala	Glu	Asp	Lys	Pro	Ser	Thr	Asp	Leu	Ser	Ala	Pro	Val
225				230					235				240	Asn
Gly	Glu	Ala	Thr	Ser	Gln	Lys	Gly	Glu	Ser	Ala	Glu	Asp	Lys	Glu
		245						250				255		His
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	260						265					270		Glu
Asp	Leu	His	Asp	Ser	Val	Arg	Glu	Gly	Pro	Asp	Leu	Asp	Arg	Pro
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Asp Glu Glu Ser
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 <211> 524
 <212> DNA
 <213> Homo sapiens

<400> 3265
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 60
 ctttttcgtg gttttcaaaa tgttccatt gagggcgat tacttttata atcaacaaaa
 120
 gagaaagtat aacttcattt tagaaattct cacctaaggc atttgaaaaa taatccaaaa
 180
 ggtacattat tgttgatttt tcttcttctt agaaaggatc ttgttcgagt agaagccaca
 240
 gtcattgaaa agacagaatc atggccaaga atcattatga gattcaggaa aaggaaaaac
 300
 ttcaagaaga aaagaagtaa gttagagaaa gtaccgctgg gccctgttgc acggtgctgg
 360
 ttgcccaggc gcatgcggac ggaggggtgtg gggcacgtgg gtctcgggac aggaagccca
 420
 ggcagggtctc aacctggctg ccactgccca cttgccccc tcactcctaga gggagcacc
 480
 agaggggtcca gcctcgtctc ccttctctc cactctccac gcgt
 524

<210> 3266
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 3266
 Met Arg Phe Arg Lys Arg Lys Asn Phe Lys Lys Lys Arg Ser Lys Leu
 1 5 10 15
 Glu Lys Val Pro Leu Gly Pro Val Ala Arg Cys Trp Leu Pro Arg Arg
 20 25 30
 Met Arg Thr Glu Gly Val Gly His Val Gly Leu Gly Thr Gly Ser Pro
 35 40 45
 Gly Arg Ser Gln Pro Gly Cys His Cys Pro Leu Ala Thr Leu Ile Leu
 50 55 60
 Glu Gly Ala Pro Arg Gly Ser Ser Leu Ala Pro Leu Leu Leu His Ala
 65 70 75 80
 Pro Arg

<210> 3267
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 3267
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 60
 tggaatacat tgaataaaaa ggtcgacaca agaattgcac agctacagga agctttgttg
 120
 cattgtggga agtttcaaga tgccttggag ccattgctca gctggttggc agataccgag
 180
 gagctcatag ccaatcagaa acctccatct gctgagtata aagtgggtgaa agcacagatc
 240
 caagaacaga agttgtccca gcgggtccta gatgatcgaa aggccacagt agacatgctt
 300
 caagcagaag gaggcagaat agcccagtc gcagagctgg ctgatagaga gaaaatcact
 360
 ggacagctgg agagtcttga aagtagatgg act
 393

<210> 3268
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 3268
 Val Glu Tyr Ala Cys Arg Val Gln Gly Leu Glu His Asp Met Glu Glu
 1 5 10 15
 Ile Asn Ala Arg Trp Asn Thr Leu Asn Lys Lys Val Ala Gln Arg Ile
 20 25 30
 Ala Gln Leu Gln Glu Ala Leu Leu His Cys Gly Lys Phe Gln Asp Ala
 35 40 45
 Leu Glu Pro Leu Leu Ser Trp Leu Ala Asp Thr Glu Glu Leu Ile Ala
 50 55 60
 Asn Gln Lys Pro Pro Ser Ala Glu Tyr Lys Val Val Lys Ala Gln Ile
 65 70 75 80
 Gln Glu Gln Lys Leu Leu Gln Arg Leu Leu Asp Asp Arg Lys Ala Thr
 85 90 95
 Val Asp Met Leu Gln Ala Glu Gly Gly Arg Ile Ala Gln Ser Ala Glu
 100 105 110
 Leu Ala Asp Arg Glu Lys Ile Thr Gly Gln Leu Glu Ser Leu Glu Ser
 115 120 125
 Arg Trp Thr
 130

<210> 3269
 <211> 1423
 <212> DNA
 <213> Homo sapiens

<400> 3269
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 60
 tttgaagctg taactttatg agcgattatt tactaccttt gagaatgtg ttttagtata
 120
 aaatatagga tgtggaagcg aaaaaatatc tgggtagcaa gtgaggtgta ctcaaaaaata
 180

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agcaaaagtc acgtgggtct gattttatcac cctcgctgga aagcttggtc tcagacacac
240
tggtactgca agtgtgtgtg aggggggaaac tctcacacac ttgtcagttg aggacagggc
300
tagactttga ggtggaccct ggctcccagg gctgtgtact cccagcccggt gtttctcttt
360
tgctcagact gaacaagtgg aacgaaatta cattaaagaa aagaaggcag cagtgaagaa
420
atttgaagac aagaagggtg agctgaaaga gaacctgatt gctgagctag aagaaaagaa
480
gaaaatgatt gaaaacgaaa tgctgacaat ggaactgaat ggagattcta tggagggtgaa
540
acctatcatg accagaaagt tgccggaggcg accaaatgat cccgtcccca tcccagacaa
600
gaggaggaaa cctgctccag ccagctaaa ctatttgta acagatgaac agatcatgga
660
ggatctgaga acattaaata agcttaagtc acccaagaga ccagcatctc catctctcc
720
tgagcacttg cctgcaacac ccgcggaatc tccagcacag agatttgagg cgcggtataga
780
agatggcaaa ctgtattatg acaaaagatg gtaccacaag agccaggcca tctatctgga
840
gtcaaaggac aaccagaaac tgagctcgct gatcagttct gtaggagcca atgagatctg
900
ggtgagggaag acaagtgaca gcaccaagat gaggatctac ctgggctcagc ttcagcgcgg
960
gctcttcgtg atccgccggc gctcagctgc ttgactttct acagtgtctt tctcttgacc
1020
ctttttctgg agtgggtttt atttttgttt tgtttcgttt tctccttaat agaaaaatgt
1080
taacttactg ggaatagcta ctcagccttg gaaatggaga gcactgcagt gaattcttta
1140
gggcactttt gtggccggat gcttccaact ttgtcagtct tttctgcctc aacttcttcc
1200
agacatcagt caccatgaga ctgttttact ttcaggcgta ttgggggggtt tgatttactt
1260
tccttttatt tctttatttt ttgcttatac ttgtttttga aaacctcttc tgagtttgaa
1320
gggacagcta tttttattga ttatctttta gtctctctac catggagaag agcaggaagg
1380
gatacactct ccagtgcatt ttcattgttt gaatcggatt agt
1423

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<210> 3270

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3270

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Met Ile Glu Asn Glu Met Leu Thr Met Glu Leu Asn Gly Asp Ser Met
1           5           10          15
Glu Val Lys Pro Ile Met Thr Arg Lys Leu Arg Arg Arg Pro Asn Asp
          20          25          30
Pro Val Pro Ile Pro Asp Lys Arg Arg Lys Pro Ala Pro Ala Gln Leu

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          35              40              45
Asn Tyr Leu Leu Thr Asp Glu Gln Ile Met Glu Asp Leu Arg Thr Leu
  50              55              60
Asn Lys Leu Lys Ser Pro Lys Arg Pro Ala Ser Pro Ser Ser Pro Glu
  65              70              75              80
His Leu Pro Ala Thr Pro Ala Glu Ser Pro Ala Gln Arg Phe Glu Ala
          85              90              95
Arg Ile Glu Asp Gly Lys Leu Tyr Tyr Asp Lys Arg Trp Tyr His Lys
          100              105              110
Ser Gln Ala Ile Tyr Leu Glu Ser Lys Asp Asn Gln Lys Leu Ser Cys
          115              120              125
Val Ile Ser Ser Val Gly Ala Asn Glu Ile Trp Val Arg Lys Thr Ser
          130              135              140
Asp Ser Thr Lys Met Arg Ile Tyr Leu Gly Gln Leu Gln Arg Gly Leu
          145              150              155              160
Phe Val Ile Arg Arg Arg Ser Ala Ala
          165

```

<210> 3271
 <211> 464
 <212> DNA
 <213> Homo sapiens

```

<400> 3271
tcatgagcag ggccaattc tggcttctct gtggctgcga tccatgtgct gggcgctcact
  60
gaaggcactg gggatcacgc cgagcacaag atggacagag atccctggcc cctcgagcag
  120
ggcagctctgt ggctctggcc cctccagttc cttgtcacca ggagataggc aatgcagctg
  180
atgagaaggg ccccggcagc aagagatcca atgatggtgg ccgccaggat cccagcgttg
  240
gtgggcagggt gtgtactggg cagctcctta ttcttttcag ctacctggac ctcaagtctt
  300
gccttcacat tccattcaga gttgatggta atggctactt ggtaggtgcc actgtctgta
  360
ggctggggcg gcgcagcag catggaacca ttggggaagc ccacgatgct tcgctgtccc
  420
atggcactgc catccctctg aggcggttgt atccccaggg atgt
  464

```

<210> 3272
 <211> 140
 <212> PRT
 <213> Homo sapiens

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<400> 3272
Met Gly Gln Arg Asp Ile Val Gly Phe Pro Asn Gly Ser Met Leu Leu
  1              5              10              15
Arg Arg Ala Gln Pro Thr Asp Ser Gly Thr Tyr Gln Val Ala Ile Thr
          20              25              30
Ile Asn Ser Glu Trp Thr Met Lys Ala Lys Thr Glu Val Gln Val Ala
          35              40              45
Glu Lys Asn Lys Glu Leu Pro Ser Thr His Leu Pro Thr Asn Ala Gly

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      50              55              60
Ile Leu Ala Ala Thr Ile Ile Gly Ser Leu Ala Ala Gly Ala Leu Leu
65              70              75              80
Ile Ser Cys Ile Ala Tyr Leu Leu Val Thr Arg Asn Trp Arg Gly Gln
      85              90              95
Ser His Arg Leu Pro Ala Pro Arg Gly Gln Gly Ser Leu Ser Ile Leu
      100              105              110
Cys Ser Ala Val Ser Pro Val Pro Ser Val Thr Pro Ser Thr Trp Met
      115              120              125
Ala Thr Thr Glu Lys Pro Glu Leu Gly Pro Ala His
      130              135              140

<210> 3273
<211> 387
<212> DNA
<213> Homo sapiens

<400> 3273
ngcgcgccag ggatggaaaa ctttattctg tatgaggaga tcggaagagg aagcaagact
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gttgtctata aagggcgacg gaaggggaaca atcaattttg tagccattct ttgtactgat
120
aagtgcagaa ggccctgaaat aaccaactgg gtccgtctca cccgtgaaat aaaacacaag
180
aatattgtaa cttttcatga atggtatgaa acaagcaacc acctctggct agtgggtggaa
240
ctccgcacag gtgggtccctt aaaaacagtt attgctcaag atgaaaacct ccagaagat
300
gttgtgagag aatttggaat tgacctgatt agtggattac atcatcttca taaacttggc
360
attctctttt tgacatttct cctagga
387

<210> 3274
<211> 129
<212> PRT
<213> Homo sapiens

<400> 3274
Xaa Ala Pro Gly Met Glu Asn Phe Ile Leu Tyr Glu Glu Ile Gly Arg
1      5      10      15
Gly Ser Lys Thr Val Val Tyr Lys Gly Arg Arg Lys Gly Thr Ile Asn
      20      25      30
Phe Val Ala Ile Leu Cys Thr Asp Lys Cys Arg Arg Pro Glu Ile Thr
      35      40      45
Asn Trp Val Arg Leu Thr Arg Glu Ile Lys His Lys Asn Ile Val Thr
      50      55      60
Phe His Glu Trp Tyr Glu Thr Ser Asn His Leu Trp Leu Val Val Glu
65      70      75      80
Leu Arg Thr Gly Gly Ser Leu Lys Thr Val Ile Ala Gln Asp Glu Asn
      85      90      95
Leu Pro Glu Asp Val Val Arg Glu Phe Gly Ile Asp Leu Ile Ser Gly
      100      105      110
Leu His His Leu His Lys Leu Gly Ile Leu Phe Val Thr Phe Leu Leu

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	115	120	125
Gly			
<210>	3275		
<211>	1266		
<212>	DNA		
<213>	Homo sapiens		
<400>	3275		
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	60		
	agaacacatg aaaggaatac atggggaaga aataaagtag aaccaagag ttcttttaag		
	120		
	ttttctttta tagagacatg aataacagat acactgaagt ataaacaaaa attggcctga		
	180		
	agcgtccggt ggccggctta gttaggagct atggctaatac atcatcctga ttgtatcttt		
	240		
	tgccgcaagc aggcgtgtgt tgccatcgga agactgtgtg aaaaatgtga tggcaagtgt		
	300		
	gtgatttgtg actcctatgt gcgtccctgc actctggtgc gcatatgtga tgagtgtaac		
	360		
	tatggatctt accaggggag ctgtgtgtatc tgtggaggac ctggggcttc tgatgcctat		
	420		
	tattgttaag agtgacccat ccaggagaag gacagagatg gctgcccaaa gattgtcaat		
	480		
	ctggggagct ctaagacaga cctcttctat gaacgcaaaa aatacggctt caagaagagg		
	540		
	tgattgggtg gtggcccctt cctccccca acatcagtct gctgcagctg ccagaaaaa		
	600		
	tgccctactac taccagcaga aaggagagc agcccagagc atcaccagga gtgcctgcta		
	660		
	gtgtactggc agcttgccac cccctcctct cccttcaacc agacacgtgg tagggatgga		
	720		
	aaaggattct tcacagagca ctctggcaca ccatatcgga gaaaaattga tagattagtt		
	780		
	aatgggtttt cttgaattcg agaagcatag atctgttctc catattggta tgttctccct		
	840		
	caaccaagat cttctaaaaa gaaataatat tttagtcttc tgcttgagga actgactgtg		
	900		
	aagcgacgcc cagtgaacaa catgatcttg cagcagctct ggtggcagct gtccttgagg		
	960		
	aaccttttgt gtgtggtggg aagctatcag aacaagaaat gtaggcatct cccgtttttt		
	1020		
	ttgggggggg ggtggggggg cagggtcttg ccctcttgaa aggcatttac ttgtttaaca		
	1080		
	ctgttcagc tacagtgggg tacagtagct ggctattcac aggcattcac atagcccact		
	1140		
	agtctcatat tattttcctt ttgagaaatt ggaaactctt tctgttgcta ttatattaat		
	1200		
	aaagtgtgtg ttatttttct ggtaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa		
	1260		
	aaaaaa		
	1266		

<210> 3276
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 3276
 Met Ala Lys His His Pro Asp Leu Ile Phe Cys Arg Lys Gln Ala Gly
 1 5 10 15
 Val Ala Ile Gly Arg Leu Cys Glu Lys Cys Asp Gly Lys Cys Val Ile
 20 25 30
 Cys Asp Ser Tyr Val Arg Pro Cys Thr Leu Val Arg Ile Cys Asp Glu
 35 40 45
 Cys Asn Tyr Gly Ser Tyr Gln Gly Arg Cys Val Ile Cys Gly Gly Pro
 50 55 60
 Gly Val Ser Asp Ala Tyr Tyr Cys Lys Glu Cys Thr Ile Gln Glu Lys
 65 70 75 80
 Asp Arg Asp Gly Cys Pro Lys Ile Val Asn Leu Gly Ser Ser Lys Thr
 85 90 95
 Asp Leu Phe Tyr Glu Arg Lys Lys Tyr Gly Phe Lys Lys Arg
 100 105 110

<210> 3277
 <211> 1435
 <212> DNA
 <213> Homo sapiens

<400> 3277
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 ctgcgtggga ggcagaaaga gctaattgagg ccacgcttgt ccctcggcca ccgtcccacc
 120
 cagactctccg tctccttaaa atgttcctgc gtaagtgcgt ggcagaagcg gctcaagcgc
 180
 actcgtgcgt cattgtctgtc agggccgagg gagcgggtgca aggcgcgcgc gtgacgtcag
 240
 gacgcgcggc tcaggacgtc gaagccaaag aagaccagag ccagccgggt ggcacagcgg
 300
 tgcctgtggc gtgttctga tcgctgggt ggtgtgtggc gtgtccctgc agcgaaggat
 360
 cctgtgtggc agtgaaaaag cagtctggct cccgaggctc accccttata ccccaaggtc
 420
 cagatggcgc ccaacgtggg tgatcaacgt agcacagatt ggtcttctca gtacagcatg
 480
 gtggctgggg caggccgaga gaatggcatg gagacgccga tgcacgagaa cccggagtgg
 540
 gagaaggccc gtcaggccct gccagcctc agcaagtcag gagctgccgg cggtctctgc
 600
 aagtcacaga gcaatgggcc tgtggccagt gcaagtacgt gtcccaggca gaagcctcag
 660
 ctttcagaga gcagcagtac taccagtggg accagcagta caactatgcc taccctaca
 720
 gctactacta tcccatgagc atgtaccaga gctatggctc cccttcccag tatgggatgg
 780

ccggctccta tggctagcca caccacagca gccatccgca ccccaacacc aagggaactct
 840
 gaaccagccc ccagtcctccg gcactggatga gagcatgtcc taccaggctc cccctcagca
 900
 gctgcgctcg gctcagcccc ctcagccctc aaatccccc catggggctc acacgtgaa
 960
 cagtggccct cagcctggga cagctccagc cacacagcan ncagccaggc ggggcccgc
 1020
 acgggcccagg cctatgggcc acacacctac accgaacctg ccaagcccaa gaaggcccaa
 1080
 cagctgtgga accgcatgaa acccgccctc gggactggag gttcaagtgc aacatccaga
 1140
 agcgaccctt tgctgttacc acccagagct ttggtccaa cgcagagggc cagcacagt
 1200
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 1260
 ggaacctgtc tgggaagccc gatgactggc ccaggagcat gaaagatgat gtggagcgt
 1320
 gcttcaccgc ctgtgagtcg gaggaggaca aggaccgcac ggaaaagctg ctcaaggagg
 1380
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 1435

<210> 3278

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3278

Met	Ala	Ala	Asn	Val	Gly	Asp	Gln	Arg	Ser	Thr	Asp	Trp	Ser	Ser	Gln
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Tyr	Ser	Met	Val	Ala	Gly	Ala	Gly	Arg	Glu	Asn	Gly	Met	Glu	Thr	Pro
			20					25					30		
Met	His	Glu	Asn	Pro	Glu	Trp	Glu	Lys	Ala	Arg	Gln	Ala	Leu	Ala	Ser
			35				40					45			
Ile	Ser	Lys	Ser	Gly	Ala	Ala	Gly	Gly	Ser	Ala	Lys	Ser	Ser	Ser	Asn
			50			55				60					
Gly	Pro	Val	Ala	Ser	Ala	Ser	Thr	Cys	Pro	Arg	Gln	Lys	Pro	Gln	Leu
65				70						75				80	
Cys	Ser	Ser	Ser	Ser	Thr	Thr	Ser	Gly	Thr	Ser	Ser	Thr	Thr	Met	Pro
				85					90					95	
Thr	Pro	Thr	Ala	Thr	Thr	Ile	Pro								
															100

<210> 3279

<211> 1130

<212> DNA

<213> Homo sapiens

<400> 3279

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 ccaagcagct ccccatcgct ccggaaacgg ctgcagctcc tgcccccaag ccggccccc
 120

cctgagccag aaccaggcac catggtggag aagggatcag atagctcctc agagaagggt
 180
 ggggtgcctg ggacccccag caccagagc ctaggcagcc ggaacttcac cgcgaacagc
 240
 aagaagatgc agagctggta cagtatgctg agccccactt ataagcagcg taatgaggag
 300
 ttccggaac tggtcagcaa actccccgaa gcagaacgcc tcattgtgga ttactctctg
 360
 gcctctgcagc gtgagatcct gctccagggc cgctctacc tctctgagaa ctggatctgc
 420
 ttctacagca acatcttccg ctgggagacc acgatctcca tccagctgaa ggaagtgc
 480
 tgtctgaaga aggaaaagac ggccaagctg atccccaacg ccatccagat ctgcacggag
 540
 agcgagaagc atttcttcac ttcttttggg gccctgagc gctgcttct cctcatcttc
 600
 cgctctggc agaatgcact gcttgaaaag acgctgagtc cccgcgagct ctggcacctg
 660
 gtgcatcagt gctacggctc agagctgggc ctcaccagtg aggatgagga ctatgtctcc
 720
 cccttgagc tgaacgggtc tgggaccccc aaggaagtgg gagatgtgat cgccctgagc
 780
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 840
 cgtggccatg tcacgcccac ctttcccga gccagcagcg acgcagacca tggggcagag
 900
 gaggacaagg aggagcaggt agacagccag ccagacgcct cctccagcca gacagtgc
 960
 ccggtggctg aacccccgag cacagagccc acccgcctg acgggcccc caccctgggc
 1020
 cccttgatc tgctgccagc tgaggagcta ttgacagaca caagtaactc ctcttcatcc
 1080
 actggggagg aagcggactt ggctgccctg cttcccagc tctccggccc
 1130

<210> 3280

<211> 376

<212> PRT

<213> Homo sapiens

<400> 3280

Xaa	Arg	Ala	His	Arg	Ala	Ala	Ser	Met	Phe	Asp	Thr	Thr	Pro	His	Ser
1				5				10					15		
Gly	Arg	Ser	Thr	Pro	Ser	Ser	Ser	Pro	Ser	Leu	Arg	Lys	Arg	Leu	Gln
				20				25					30		
Leu	Leu	Pro	Pro	Ser	Arg	Pro	Pro	Glu	Pro	Glu	Pro	Gly	Thr	Met	
				35			40					45			
Val	Glu	Lys	Gly	Ser	Asp	Ser	Ser	Ser	Glu	Lys	Gly	Gly	Val	Pro	Gly
				50			55				60				
Thr	Pro	Ser	Thr	Gln	Ser	Leu	Gly	Ser	Arg	Asn	Phe	Ile	Arg	Asn	Ser
65					70				75				80		
Lys	Lys	Met	Gln	Ser	Trp	Tyr	Ser	Met	Leu	Ser	Pro	Thr	Tyr	Lys	Gln
				85					90				95		
Arg	Asn	Glu	Asp	Phe	Arg	Lys	Leu	Phe	Ser	Lys	Leu	Pro	Glu	Ala	Glu

```

          100          105          110
Arg Leu Ile Val Asp Tyr Ser Cys Ala Leu Gln Arg Glu Ile Leu Leu
115          120          125
Gln Gly Arg Leu Tyr Leu Ser Glu Asn Trp Ile Cys Phe Tyr Ser Asn
130          135          140
Ile Phe Arg Trp Glu Thr Thr Ile Ser Ile Gln Leu Lys Glu Val Thr
145          150          155
Cys Leu Lys Lys Glu Lys Thr Ala Lys Leu Ile Pro Asn Ala Ile Gln
165          170          175
Ile Cys Thr Glu Ser Glu Lys His Phe Phe Thr Ser Phe Gly Ala Arg
180          185          190
Asp Arg Cys Phe Leu Leu Ile Phe Arg Leu Trp Gln Asn Ala Leu Leu
195          200          205
Glu Lys Thr Leu Ser Pro Arg Glu Leu Trp His Leu Val His Gln Cys
210          215          220
Tyr Gly Ser Glu Leu Gly Leu Thr Ser Glu Asp Glu Asp Tyr Val Ser
225          230          235
Pro Leu Gln Leu Asn Gly Leu Gly Thr Pro Lys Glu Val Gly Asp Val
245          250          255
Ile Ala Leu Ser Asp Ile Thr Ser Ser Gly Ala Ala Asp Arg Ser Gln
260          265          270
Glu Pro Ser Pro Val Gly Ser Arg Arg Gly His Val Thr Pro Asn Leu
275          280          285
Ser Arg Ala Ser Ser Asp Ala Asp His Gly Ala Glu Glu Asp Lys Glu
290          295          300
Glu Gln Val Asp Ser Gln Pro Asp Ala Ser Ser Ser Gln Thr Val Thr
305          310          315
Pro Val Ala Glu Pro Pro Ser Thr Glu Pro Thr Gln Pro Asp Gly Pro
325          330          335
Thr Thr Leu Gly Pro Leu Asp Leu Leu Pro Ser Glu Glu Leu Leu Thr
340          345          350
Asp Thr Ser Asn Ser Ser Ser Ser Thr Gly Glu Glu Ala Asp Leu Ala
355          360          365
Ala Leu Leu Pro Asp Leu Ser Gly
370          375

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<210> 3281

<211> 842

<212> DNA

<213> Homo sapiens

<400> 3281

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gaattctgcc ttgccgtgtg cctcattggc caaaggaaag caacagagtc tgcagccagg
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gcaggaccgg caggaggggc ctggaccggg ggggctcctg gcagcgctgt gcctttctga
120
ggcaaggagg tagagccagc ggctgaggac ctgtcagggc cagtcccagc tctgcagctt
180
gctgtgtgac ctggcacaca tctctcctt gcctccctca gtctcttccc ctgcaagagc
240
gggtcctgac acggaatctca tgggattgct ctgaggccca ggcagtccca ggctcaacca
300
ctgggttaca aagtgtgttg ttccaggaa gaacagatgg gggcgccctga gggcaaaagg
360

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cctgagtggtg ggtcaggat atgccggctg ctgcctcagg ggctgggttt tcatcttggtg
 420
 tgtcttgaca ggggtgtgaca cttggcacca cactgttccc tgcccttca tggatgtggc
 480
 ccacatgatg ttcttttctt cttgcaaaag aagttgtctg aagggccact gtccagcagc
 540
 ccccgaggtg cctgggccac ggtgcctttg tggggccagc tacaaggagg acttgcaggc
 600
 tcgtgtctgg gacagatact ggcgccaggg ccaagtgaag cccgggattg gtgggcatct
 660
 cttagctggtc cctgagagag ggtggagggt gctgacaggc cttggcgctt tcatctgtca
 720
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<210> 3282

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3282

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 Thr Ser Phe Ala Arg Gly Lys Glu His His Val Gly His Ile His Glu
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 Gly Thr Gly Asn Ser Val Val Pro Ser Val Thr Pro Cys Gln Asp Thr
 65 70 75 80
 Gln Asp Glu Asn Pro Ala Pro Glu Arg Ala Ala Gly Ile Ser Ser Thr
 85 90 95
 His Thr Gln Ala Leu Cys Pro Gln Ala Pro Pro Ser Val Leu Pro Gly
 100 105 110
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 Arg Asp
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<210> 3283

<211> 3268

<212> DNA

<213> Homo sapiens

<400> 3283

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<210> 3284

<211> 1012

<212> PRT

<213> Homo sapiens

<400> 3284

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Ala Phe Thr Arg Xaa His Val Cys Ala Glu Asn Leu Pro Val Leu
      35           40           45
Met Glu His Lys Ala Thr Thr Ile Gln Lys His Val Arg Gly Trp Met
 50           55           60
Ala Arg Arg His Phe Gln Arg Leu Arg Asp Ala Ala Ile Val Ile Gln
 65           70           75
Cys Ala Phe Arg Met Leu Lys Ala Arg Arg Glu Leu Lys Ala Leu Arg
      85           90           95
Ile Glu Ala Arg Ser Ala Glu His Leu Lys Arg Leu Asn Val Gly Met
      100          105          110
Glu Asn Lys Val Val Gln Leu Gln Arg Lys Ile Asp Glu Gln Asn Lys
      115          120          125
Glu Phe Lys Thr Leu Ser Glu Gln Leu Ser Val Thr Thr Ser Thr Tyr
      130          135          140
Thr Met Glu Val Glu Arg Leu Lys Lys Glu Leu Val His Tyr Gln Gln
      145          150          155          160
Ser Pro Gly Glu Asp Thr Ser Leu Arg Leu Gln Glu Glu Val Glu Ser
      165          170          175
Leu Arg Thr Glu Leu Gln Arg Ala His Ser Glu Arg Lys Ile Leu Glu
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Asp Ala His Ser Arg Glu Lys Asp Glu Leu Arg Lys Arg Val Ala Asp
      195          200          205
Leu Glu Gln Glu Asn Ala Leu Leu Lys Asp Glu Lys Glu Gln Leu Asn
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Asn Gln Ile Leu Cys Gln Ser Lys Asp Glu Phe Ala Gln Asn Ser Val
      225          230          235          240
Lys Glu Asn Leu Leu Met Lys Lys Glu Leu Glu Glu Arg Ser Arg
      245          250          255
Tyr Gln Asn Leu Val Lys Glu Tyr Ser Gln Leu Glu Gln Arg Tyr Asp
      260          265          270
Asn Leu Arg Asp Glu Met Thr Ile Ile Lys Gln Thr Pro Gly His Arg
      275          280          285
Arg Asn Pro Ser Asn Gln Ser Ser Leu Glu Ser Asp Ser Asn Tyr Pro
      290          295          300
Ser Ile Ser Thr Ser Glu Ile Gly Asp Thr Glu Asp Ala Leu Gln Gln
      305          310          315          320
Val Glu Glu Ile Gly Leu Glu Lys Ala Ala Met Asp Met Thr Val Phe
      325          330          335
Leu Lys Leu Gln Lys Arg Val Arg Glu Leu Glu Gln Glu Arg Lys Lys
      340          345          350
Leu Gln Val Gln Leu Glu Lys Arg Glu Gln Gln Asp Ser Lys Lys Val
      355          360          365
Gln Ala Glu Pro Pro Gln Thr Asp Ile Asp Leu Asp Pro Asn Ala Asp

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370		375		380	
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385	390	395		400	
Lys Leu Lys Asn Asp	Leu Asn Glu Leu Arg	Lys Ala Val Ala Asp Gln			
	405	410		415	
Ala Thr Gln Asn Asn Ser	Ser His Gly Ser	Pro Asp Ser Tyr Ser Leu			
	420	425		430	
Leu Leu Asn Gln Leu Lys	Leu Ala His Glu Glu Leu	Glu Val Arg Lys			
	435	440		445	
Glu Glu Val Leu Ile Leu	Arg Thr Gln Ile Val	Ser Ala Asp Gln Arg			
	450	455		460	
Arg Leu Ala Gly Arg Asn	Ala Glu Pro Asn Ile	Asn Ala Arg Ser Ser			
465	470	475		480	
Trp Pro Asn Ser Glu Arg	His Val Asp Gln Glu	Asp Ala Ile Glu Ala			
	485	490		495	
Tyr His Gly Val Cys Gln	Thr Asn Arg Leu Leu	Glu Ala Gln Leu Gln			
	500	505		510	
Ala Gln Ser Leu Glu His	Glu Glu Glu Val Glu	His Leu Lys Ala Gln			
	515	520		525	
Leu Glu Ala Leu Lys Glu	Glu Met Asp Lys Gln	Gln Thr Phe Cys			
	530	535		540	
Gln Thr Leu Leu Leu Ser	Pro Glu Ala Gln Val	Glu Phe Gly Val Gln			
545	550	555		560	
Gln Glu Ile Ser Arg Leu	Thr Asn Glu Asn Leu	Asp Leu Lys Glu Leu			
	565	570		575	
Val Glu Lys Leu Glu Lys	Asn Glu Arg Lys Leu	Lys Lys Gln Leu Lys			
	580	585		590	
Ile Tyr Met Lys Lys Ala	Gln Asp Leu Glu Ala	Ala Gln Ala Leu Ala			
	595	600		605	
Gln Ser Glu Arg Lys Arg	His Glu Leu Asn Arg	Gln Val Thr Val Gln			
	610	615		620	
Arg Lys Glu Lys Asp Phe	Gln Gly Met Leu Glu	Tyr His Lys Glu Asp			
	625	630		635	
Glu Ala Leu Leu Ile Arg	Asn Leu Val Thr Asp	Leu Lys Pro Gln Met			
	645	650		655	
Leu Ser Gly Thr Val Pro	Cys Leu Pro Ala Tyr	Ile Leu Tyr Met Cys			
	660	665		670	
Ile Arg His Ala Asp Tyr	Thr Asn Asp Asp Leu	Lys Val His Ser Leu			
	675	680		685	
Leu Thr Ser Thr Ile Asn	Gly Ile Lys Lys Val	Leu Lys Lys His Asn			
	690	695		700	
Asp Asp Phe Glu Met Thr	Ser Phe Trp Leu Ser	Asn Thr Cys Arg Leu			
	705	710		715	
Leu His Cys Leu Lys Gln	Tyr Ser Gly Asp Glu	Gly Phe Met Thr Gln			
	725	730		735	
Asn Thr Ala Lys Gln Asn	Glu His Cys Leu Lys	Asn Phe Asp Leu Thr			
	740	745		750	
Glu Tyr Arg Gln Val Leu	Ser Asp Leu Ser Ile	Gln Ile Tyr Gln Gln			
	755	760		765	
Leu Ile Lys Ile Ala Glu	Gly Val Leu Gln Pro	Met Ile Val Ser Ala			
	770	775		780	
Met Leu Glu Asn Glu Ser	Ile Gln Gly Leu Ser	Gly Val Lys Pro Thr			
	785	790		795	
Gly Tyr Arg Lys Arg Ser	Ser Ser Ser Met Ala	Asp Gly Asp Asn Ser Tyr			

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      805              810              815
Cys Leu Glu Ala Ile Ile Arg Gln Met Asn Ala Phe His Thr Val Met
      820              825              830
Cys Asp Gln Gly Leu Asp Pro Glu Ile Ile Leu Gln Val Phe Lys Gln
      835              840              845
Leu Phe Tyr Met Ile Asn Ala Val Thr Leu Asn Asn Leu Leu Leu Arg
      850              855              860
Lys Asp Val Cys Ser Trp Ser Thr Gly Met Gln Leu Arg Tyr Asn Ile
      865              870              875              880
Ser Gln Leu Glu Glu Trp Leu Arg Gly Arg Asn Leu His Gln Ser Gly
      885              890              895
Ala Val Gln Thr Met Glu Pro Leu Ile Gln Ala Ala Gln Leu Leu Gln
      900              905              910
Leu Lys Lys Lys Thr Gln Glu Asp Ala Glu Ala Ile Cys Ser Leu Cys
      915              920              925
Thr Ser Leu Ser Thr Gln Gln Ile Val Lys Ile Leu Asn Leu Tyr Thr
      930              935              940
Pro Leu Asn Glu Phe Glu Glu Arg Val Thr Val Ala Phe Ile Arg Thr
      945              950              955              960
Ile Gln Ala Gln Leu Gln Glu Arg Asn Asp Pro Gln Gln Leu Leu Leu
      965              970              975
Asp Ala Lys His Met Phe Pro Val Leu Phe Pro Phe Asn Pro Ser Ser
      980              985              990
Leu Thr Met Asp Ser Ile His Ile Pro Ala Cys Leu Asn Leu Glu Phe
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Leu Asn Glu Val
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<210> 3285

<211> 1518

<212> DNA

<213> Homo sapiens

<400> 3285

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600

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<210> 3286

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3286

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			20					25					30		
Lys	Asn	Asn	Asp	Asn	Thr	Arg	Pro	Ala	Pro	Pro	Pro	Lys	Ser	Cys	Cys
			35				40					45			
Cys	Glu	Leu	Arg	Leu	Gln	Lys	Arg	Thr	His	Thr	Val	Ala	Asp	Lys	Thr
	50					55					60				
Gln	Ala	Arg	Arg	Met	Phe	Glu	Ser	Gln	Ser	Ala	Leu	Ser	Leu	Val	Pro
65				70					75					80	
Val	Thr	Ser	Tyr	Val	Gln	Leu	Pro	Gly	Pro	Ile	Pro	Tyr	Ser	Asp	Cys
				85				90					95		
Arg	Leu	Arg	Thr	Glu	Asp	Ala	Pro	Leu	Leu	Ser	Leu	His	Phe	Asp	Leu
			100					105					110		
Leu	Phe	Pro	Leu	Lys	Thr	Arg	Arg	Pro	Ala	Phe	Pro	Lys	Thr	Ala	Trp

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Pro	Trp	Leu	Cys	Thr	Leu	Phe	Thr	Thr	Asp	Gln	Asn	Ser	Ile
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<210> 3287
 <211> 921
 <212> DNA
 <213> Homo sapiens

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<210> 3288
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 3288
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 20 25 30
 Ser Cys Ser Phe Ser Phe Gly Leu Ser Lys Tyr Pro Gly Pro Pro Cys

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          35              40              45
Ile Pro Leu Pro Phe Ser Cys Gly Cys Gly Ala Ser Leu Asn Arg Ser
   50              55              60
Thr Phe Leu Phe Pro Ser Thr Arg Asp Arg Glu Ser Leu Lys Gly Ser
   65              70              75              80
Gly Ala Pro Ser Ala His Leu Asp Gly Ala Gly Asp Ala Gln Arg Arg
          85              90              95
Phe Arg Ala Leu Tyr Phe Gln Leu Gln His Ser Gln Val Phe Thr Ala
          100              105              110
Gln Gly Asp Gly Ala Arg Val Thr Arg Asn Pro Gly Glu Gly Arg Ser
          115              120              125
Phe Pro Arg Arg Gly Ala Thr Ser Phe Pro Asp Trp Ala Tyr Ala Gly
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Gly Arg Gln Leu
145

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<210> 3289

<211> 554

<212> DNA

<213> Homo sapiens

<400> 3289

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   120
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   180
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<210> 3290

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3290

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          20              25              30
Gly Ser Leu Thr Gln Cys Arg Arg Ala Trp Val Pro Pro Trp Thr Gln

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  50              55              60
Cys Ala Ala Arg Arg Gly Cys Leu Val Ser Gly Arg Trp Ser Thr His
  65              70              75              80
His Arg Val Glu Ser Lys Ala Ser Pro Leu Ser Pro Ser Leu Pro Trp
      85              90              95
Thr Ser Pro Leu Pro Ala Thr Leu Ala Gly Leu Cys Glu Trp Glu Gly
      100              105              110
Arg Pro Ala Leu Ala Gly Ser Ser Pro Val Pro Pro Ala Leu Ile Leu
      115              120              125
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<210> 3291

<211> 1075

<212> DNA

<213> Homo sapiens

<400> 3291

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<210> 3292

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3292

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		20						25					30		
Trp	Ser	Ala	Thr	Pro	Gly	Pro	Pro	Trp	Ala	Pro	Ser	Pro	Ala	Thr	Pro
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Pro	His	Trp	Leu	Phe	Thr	Trp	Leu	Ala	Val	Ser	Val	Ser	Gln	Pro	Gly
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Ser	Glu	Ser	Xaa	Arg	Arg	Pro	Leu	Pro	Pro	Gln	Leu	Pro	Pro	Pro	
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<210> 3293

<211> 2362

<212> DNA

<213> Homo sapiens

<400> 3293

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2362

<210> 3294

<211> 353

<212> PRT

<213> Homo sapiens

<400> 3294

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      20      25      30
Thr Ser Leu Pro Pro Gly Pro Pro Ala Gly Arg Arg His Leu Pro Leu
      35      40      45
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      50      55      60
Val Phe Val Ile Leu Phe Ala Leu Ile Thr Ile Leu Ile Leu Tyr Ser
65      70      75      80
Ser Asn Ser Ala Asn Glu Val Phe His Tyr Gly Ser Leu Arg Gly Arg
      85      90      95
Ser Arg Arg Pro Val Asn Leu Lys Lys Trp Ser Ile Thr Asp Gly Tyr
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Val Pro Ile Leu Gly Asn Lys Thr Leu Pro Ser Arg Cys His Gln Cys
      115     120     125
Val Ile Val Ser Ser Ser Ser His Leu Leu Gly Thr Lys Leu Gly Pro
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Glu Ile Glu Arg Ala Glu Cys Thr Ile Arg Met Asn Asp Ala Pro Thr
145     150     155     160
Thr Gly Tyr Ser Ala Asp Val Gly Asn Lys Thr Thr Tyr Arg Val Val
      165     170     175
Ala His Ser Ser Val Phe Arg Val Leu Arg Arg Pro Gln Glu Phe Val
      180     185     190
Asn Arg Thr Pro Glu Thr Val Phe Ile Phe Trp Gly Pro Pro Ser Lys
      195     200     205
Met Gln Lys Pro Gln Gly Ser Leu Val Arg Val Ile Gln Arg Ala Gly
210     215     220
Leu Val Phe Pro Asn Met Glu Ala Tyr Ala Val Ser Pro Gly Arg Met
225     230     235     240
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      245     250     255
Lys Ser His Ser Trp Leu Ser Thr Gly Trp Phe Thr Met Val Ile Ala
      260     265     270
Val Glu Leu Cys Asp His Val His Val Tyr Gly Met Val Pro Pro Asn
275     280     285
Tyr Cys Ser Gln Arg Pro Arg Leu Gln Arg Met Pro Tyr His Tyr Tyr
290     295     300
Glu Pro Lys Gly Pro Asp Glu Cys Val Thr Tyr Ile Gln Asn Glu His
305     310     315     320
Ser Arg Lys Gly Asn His His Arg Phe Ile Thr Glu Lys Arg Val Phe
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<210> 3295

<211> 690

<212> DNA

<213> Homo sapiens

<400> 3295

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<210> 3296

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3296

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			20					25					30		
Pro	Arg	His	Met	Gly	Pro	Ala	Leu	Arg	Ser	Leu	Gln	Val	Lys	Lys	Gly
			35				40					45			
Thr	Glu	His	Ala	Asp	Pro	Leu	Pro	Phe	Pro	Ser	Val	Ser	Leu	Ser	Gly
			50				55				60				
Phe	Thr	Val	Gly	Thr	Leu	Ser	Glu	Thr	Ser	Thr	Gly	Gly	Pro	Ala	Thr
65					70					75				80	
Pro	Thr	Trp	Lys	Glu	Cys	Pro	Ile	Cys	Lys	Glu	Arg	Phe	Pro	Ala	Glu
					85				90					95	
Ser	Asp	Lys	Asp	Ala	Leu	Glu	Asp	His	Met	Asp	Gly	His	Phe	Phe	Phe
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<210> 3297
<211> 3176
<212> DNA
<213> Homo sapiens

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<210> 3298

<211> 251

<212> PRT

<213> Homo sapiens

<400> 3298

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		20						25					30		
Cys	Leu	Trp	Val	Ser	Phe	Cys	Val	Cys	Val	Cys	Ile	Cys	Val	Cys	Val
		35				40						45			
Xaa	Leu	Cys	Ala	Cys	Met	Cys	Leu	Asp	Val	Cys	Phe	Cys	Met	Cys	Leu
	50					55					60				
Cys	Val	Cys	Leu	Tyr	Val	Cys	Ile	Cys	Val	Tyr	Val	Cys	Val	Cys	His
65				70						75				80	
Phe	Val	Cys	Phe	Trp	Val	Cys	Leu	Ser	Ala	Cys	Leu	Cys	Ile	Pro	Val
				85					90					95	
Ser	Pro	Cys	Val	Cys	Leu	Cys	Val	Cys	Ile	Cys	Xaa	Cys	Leu	Cys	Met
			100					105					110		
Cys	Val	Arg	Gly	Cys	Val	Ser	Val	Cys	Val	Cys	Val	Cys	Ile	Glu	Arg
		115				120							125		
Glu	Gly	Glu	Arg	Lys	Gly	Ala	Thr	Asp	Gly	Ser	Ala	Trp	Lys	Val	Tyr
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Pro	His	Ser	Gln	Pro	Trp	Glu	Glu	Ser	Val	Asn	Pro	Pro	Thr	Gly	Gln
				150						155				160	
Asp	Gln	Leu	Trp	Trp	Cys	Leu	Ala	Asp	Ser	Gly	Asn	Val	Thr	Phe	His
				165				170						175	
Leu	Arg	Met	Gly	Leu	His	Phe	Leu	Gly	Lys	Glu	Cys	Arg	Ser	Trp	Ser
			180					185					190		
Leu	Lys	Glu	Cys	Phe	Phe	Phe	Pro	Phe	Val	Ile	Glu	Arg	Ala	Gln	Pro
		195					200						205		
Cys	Val	His	Trp	Leu	Thr	Val	Thr	Asn	Leu	Arg	Val	Gly	Asp	Ser	His
		210				215					220				
Arg	Glu	Glu	Thr	Glu	Gly	Thr	Ala	Asp	Ser	Glu	Gln	Glu	Ser	Gly	Gly
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Thr	Ser	Leu	Pro	Leu	Gly	Pro	Asn	Pro	Gln	Leu					
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<210> 3299

<211> 1387

<212> DNA

<213> Homo sapiens

<400> 3299

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<210> 3300

<211> 219

<212> PRT

<213> Homo sapiens

<400> 3300

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	35	40	45
Ser Ile Gln Gln Phe Thr Glu Met Asn Leu Leu Ser Asp Tyr Arg Phe			
	50	55	60
Leu Glu Asp Val Ala Arg Thr Ala Asp His Ile Ser Arg Asp Ala Phe			
	65	70	75
Leu Lys Arg Pro Ile Ser Asn Lys Tyr Met Tyr Phe Met Lys Asn Arg			
	85	90	95
Ala Arg Ser Lys Gly Ile Asn Leu Lys Leu Leu Pro Asn Gly Phe Thr			
	100	105	110
Lys Arg Lys Glu Asn Ser Thr Phe Phe Asp Lys Lys Lys Gln Gln Phe			
	115	120	125
Cys Trp His Val Lys Leu Gln Phe Pro Gln Ser Gln Ala Glu Tyr Ile			
	130	135	140
Glu Lys Arg Val Pro Asp Asp Lys Thr Ile Asn Glu Ile Leu Lys Pro			
	145	150	155
Tyr Ile Asp Pro Glu Lys Ser Asp Pro Val Ile Arg Gln Arg Leu Lys			
	165	170	175
Ala Tyr Ile Arg Ser Gln Thr Gly Val Gln Ile Leu Met Lys Ile Glu			
	180	185	190
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<210> 3301

<211> 2109

<212> DNA

<213> Homo sapiens

<400> 3301

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<210> 3302

<211> 323

<212> PRT

<213> Homo sapiens

<400> 3302

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Gln Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro Asp Ser
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Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala
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Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg
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Pro Thr Cys Gly Arg Glu Ser Ser Pro Arg Glu Thr Lys Leu Arg Met
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Tyr Gly Leu Tyr Asp Leu Leu Gly Asn Val Trp Glu Trp Thr Ala Ser
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Pro Tyr Gln Ala Ala Glu Gln Asp Met Arg Val Leu Arg Gly His Pro
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225          230          235
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260          265          270
Lys Asn Phe Pro Phe Pro Val Ser His Pro Ser Val Ala Gly Ala Ser
275          280          285
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<210> 3303

<211> 699

<212> DNA

<213> Homo sapiens

<400> 3303

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<210> 3304

<211> 233

<212> PRT

<213> Homo sapiens

<400> 3304

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			20					25					30		
Asp	Arg	Arg	Ser	Thr	Glu	Pro	Ser	Val	Thr	Pro	Asp	Leu	Leu	Asn	Phe
			35				40				45				
Lys	Lys	Gly	Trp	Leu	Thr	Lys	Gln	Tyr	Glu	Asp	Gly	Gln	Trp	Lys	Lys
	50				55					60					
His	Trp	Phe	Val	Leu	Ala	Asp	Gln	Ser	Leu	Arg	Tyr	Tyr	Arg	Asp	Ser
	65				70					75				80	
Val	Ala	Glu	Glu	Ala	Ala	Asp	Leu	Asp	Gly	Glu	Ile	Asp	Leu	Ser	Ala
			85						90					95	
Cys	Tyr	Asp	Val	Thr	Glu	Tyr	Pro	Val	Gln	Arg	Asn	Tyr	Gly	Phe	Gln
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Ile	His	Thr	Lys	Glu	Gly	Glu	Phe	Thr	Leu	Ser	Ala	Met	Thr	Ser	Gly
		115					120					125			
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	130				135					140					
Thr	Ala	Pro	Asp	Val	Thr	Ser	Ser	Leu	Pro	Glu	Glu	Lys	Asn	Lys	Ser
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Arg	Arg	Arg	Glu	Gly	Arg
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<210> 3305

<211> 2717

<212> DNA

<213> Homo sapiens

<400> 3305

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<210> 3306

<211> 319

<212> PRT

<213> Homo sapiens

<400> 3306

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 35           40           45
Trp His Pro Thr Leu Asn Leu Pro Leu Ser Pro Gln Gly Thr Val Arg
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Thr Ala Val Glu Phe Gln Val Met Thr Gln Thr Gln Ser Leu Ser Phe
 65           70           75           80
Leu Leu Gly Ser Ser Ala Ser Leu Asp Cys Gly Phe Ser Met Ala Pro
 85           90           95
Gly Leu Asp Leu Ile Ser Val Glu Trp Arg Leu Gln His Lys Gly Arg
100           105           110
Gly Gln Leu Val Tyr Ser Trp Thr Ala Gly Gln Gly Gln Ala Val Arg
115           120           125
Lys Gly Ala Thr Leu Xaa Ala Cys Thr Thr Gly His Gly Xaa Arg Asp
130           135           140
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145           150           155           160
Ile Cys Gln Ile Thr Thr Ser Leu Tyr Arg Ala Gln Gln Ile Ile Gln
165           170           175
Leu Asn Ile Gln Ala Ser Pro Lys Val Arg Leu Ser Leu Ala Asn Glu
180           185           190
Ala Leu Leu Pro Thr Leu Ile Cys Asp Ile Ala Gly Tyr Tyr Pro Leu
195           200           205
Asp Val Val Val Thr Trp Thr Arg Glu Glu Leu Gly Gly Ser Pro Ala
210           215           220
Gln Val Ser Gly Ala Ser Phe Ser Ser Leu Arg Gln Ser Val Ala Gly
225           230           235           240
Thr Tyr Ser Ile Ser Ser Ser Leu Thr Ala Glu Pro Gly Leu Cys Arg
245           250           255
Cys His Leu His Leu Pro Gly His Thr His Leu Ser Gly Gly Ala Pro
260           265           270
Trp Gly Gln His Pro Gly Cys Pro Thr Arg Ala Glu Asn Ser Leu Gly
275           280           285
Ser His Leu Cys Gln Gln Ser Leu Pro Ser Cys Thr Asp Val Pro Gly
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<210> 3307

<211> 352

<212> DNA

<213> Homo sapiens

<400> 3307

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<210> 3308

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3308

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Ser	Leu	His	Pro	Asp	Pro	Gly	Ala	Ser	Leu	Pro	Cys	Pro	Val	Leu	Ile
			20					25				30			
Pro	Arg	Trp	Glu	Pro	Cys	Leu	Gly	Gln	Gly	Gly	Arg	Val	Asp	Gly	Ser
		35					40					45			
Trp	Asp	Cys	Asp	Ile	Gly	Arg	Arg	Gly	Arg	Ser	Pro	Ala	Leu	Ser	Ser
	50					55				60					
Ala	Gly	Trp	Ala	Gly	Ile	His	Leu	Ala	Ala	Ser	Gln	Gly	Leu	Cys	Pro
65					70					75				80	
Ala	Gly	Trp	Ser	Leu	Cys	Cys	Pro	Asn	Gln	Val	Ser	Thr	Phe	Pro	Ala
			85					90						95	
Pro	Met	Arg	Arg	Glu	Gly	Gly	Arg	Trp	Trp	Leu	Gly	Trp	Arg		
			100					105					110		

<210> 3309

<211> 737

<212> DNA

<213> Homo sapiens

<400> 3309

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<210> 3310

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3310

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			20				25						30		
Ala	Gln	Leu	Glu	Glu	Gln	Phe	Tyr	Leu	Gln	Ala	Leu	Lys	Leu	Pro	Asn
		35					40					45			
Gln	Thr	His	Pro	Asp	Val	Pro	Val	Gly	Asp	Glu	Ser	Gln	Ala	Arg	Val
	50					55				60					
Leu	His	Met	Val	Gly	Asp	Lys	Pro	Val	Phe	Ser	Phe	Gln	Pro	Arg	Gly
65					70					75				80	
His	Leu	Glu	Ile	Gly	Glu	Lys	Leu	Asp	Ile	Ile	Arg	Gln	Lys	Arg	Leu
				85				90						95	
Ser	His	Val	Ser	Gly	His	Arg	Ser	Tyr	Tyr	Leu	Arg	Gly	Ala	Gly	Ala
			100					105					110		
Leu	Leu	Gln	His	Gly	Leu	Val	Asn	Phe	Thr	Phe	Asn	Lys	Leu	Leu	Arg
		115					120				125				
Arg	Gly	Phe	Thr	Pro	Met	Thr	Val	Pro	Asp	Leu	Leu	Arg	Gly	Ala	Val
	130					135					140				
Phe	Glu	Gly	Cys	Gly	Met	Thr	Pro	Asn	Ala	Asn	Pro	Ser	Gln	Ile	Tyr
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Asn	Ile	Asp	Pro	Ala	Arg	Phe	Lys	Asp	Leu	Asn	Leu	Ala	Gly	Thr	Ala
				165					170					175	
Glu	Val	Gly	Leu	Ala	Gly	Tyr	Phe	Met	Asp	His	Thr	Val	Ala	Phe	Arg
			180					185					190		
Asp	Leu	Pro	Val	Arg	Met	Val	Cys	Ser	Ser	Thr	Cys	Tyr	Arg	Ala	Glu
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<210> 3311

<211> 486

<212> DNA

<213> Homo sapiens

<400> 3311

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<210> 3312

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3312

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		20						25				30			
Phe	Tyr	Glu	Asp	Cys	Thr	Ala	Ser	Ile	Trp	Glu	Tyr	Glu	Asp	Asp	Phe
	35					40				45					
Gln	Ile	Gln	Arg	Ser	Pro	Asn	Arg	Trp	Ser	Ser	Val	Phe	Trp	Lys	Val
50					55					60					
Gly	Leu	Ile	Ser	Gly	Thr	Val	Phe	Val	Ile	Leu	Gly	Leu	Thr	Val	Leu
65			70					75			80				
Ala	Val	Gly	Phe	Leu	Val	Pro	Pro	Lys	Ile	Glu	Ala	Phe	Gly	Glu	Ala
		85						90					95		
Asp	Phe	Val	Val	Val	Asp										
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<210> 3313

<211> 1791

<212> DNA

<213> Homo sapiens

<400> 3313

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<211> 537

<212> PRT

<213> Homo sapiens

<400> 3314

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 His Lys Val Ser Val Ser Pro Val Val His Val Arg Gly Leu Cys Glu
 65 70 75 80
 Ser Val Val Glu Ala Asp Leu Val Glu Ala Leu Glu Lys Phe Gly Thr
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 Ile Cys Tyr Val Met Met Met Pro Phe Lys Arg Gln Ala Leu Val Glu
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 Glu Pro Val Tyr Ile Ala Gly Gln Gln Ala Phe Phe Asn Tyr Ser Thr
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 Ser Lys Arg Ile Thr Arg Pro Gly Asn Thr Asp Asp Pro Ser Gly Gly
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 Asn Lys Val Leu Leu Leu Ser Ile Gln Asn Pro Leu Tyr Pro Ile Thr
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 Val Asp Val Leu Tyr Thr Val Cys Asn Pro Val Gly Lys Val Gln Arg
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 Ser Val Leu Cys Ala Gln Lys Ala Lys Ala Ala Leu Asn Gly Ala Asp
 210 215 220
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 245 250 255
 Pro Tyr Leu Gly Arg Arg Asp Arg Gly Lys Gly Arg Gln Arg Gln Ala
 260 265 270
 Ile Leu Gly Glu His Pro Ser Ser Phe Arg His Asp Gly Tyr Gly Ser
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 Asp Thr Pro Glu Leu Val Ala Tyr Pro Leu Pro Gln Ala Ser Ser Ser
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 Tyr Met His Gly Gly Asn Pro Ser Gly Ser Val Val Met Val Ser Gly
 325 330 335
 Leu His Gln Leu Lys Met Asn Cys Ser Arg Val Phe Asn Leu Phe Cys
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 Leu Tyr Gly Asn Ile Glu Lys Val Lys Phe Met Lys Thr Ile Pro Gly
 355 360 365
 Thr Ala Leu Val Glu Met Gly Asp Glu Tyr Ala Val Glu Arg Ala Val
 370 375 380
 Thr His Leu Asn Asn Val Lys Leu Phe Gly Lys Arg Leu Asn Val Cys
 385 390 395 400
 Val Ser Lys Gln His Ser Val Val Pro Ser Gln Ile Phe Glu Leu Glu

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Cys	Val	Leu	His	Tyr	Tyr	Asn	Val	Pro	Leu	Cys	Val	Thr	Glu	Glu	Thr				
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Lys	Val	Phe	Asp	Ala	Lys	Pro	Ser	Ala	Lys	Thr	Leu	Ser	Gly	Leu	Leu				
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Glu	Trp	Glu	Cys	Lys	Thr	Asp	Ala	Val	Glu	Ala	Leu	Thr	Ala	Leu	Asn				
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His	Tyr	Gln	Ile	Arg	Val	Pro	Asn	Gly	Ser	Asn	Pro	Tyr	Thr	Leu	Lys				
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<211> 934
<212> DNA
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<210> 3316
<211> 187
<212> PRT
<213> Homo sapiens

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Val Pro Lys Thr Ser Leu Ser Ser Pro Pro Trp Pro Glu Val Val Leu
35 40 45
Pro Asp Pro Val Glu Glu Thr Arg His His Ala Glu Val Val Lys Lys
50 55 60
Val Asn Glu Met Ile Val Thr Gly Gln Tyr Gly Arg Leu Phe Ala Val
65 70 75 80
Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser Glu Asp Leu Ile
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Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu Arg Ile Arg Leu
100 105 110
Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr Leu Leu Gly Lys
115 120 125
Pro Leu Leu Gly Lys Asp Leu Val Arg Val Glu Ala Thr Val Ile Glu
130 135 140
Lys Thr Glu Ser Trp Pro Arg Ile Ile Met Arg Phe Arg Lys Arg Lys
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Asn Phe Lys Lys Lys Arg Ile Val Thr Thr Pro Gln Thr Val Leu Arg
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Ile Asn Ser Ile Glu Ile Ala Pro Cys Leu Leu
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<210> 3317
<211> 1665
<212> DNA
<213> Homo sapiens

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420

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<210> 3318

<211> 253

<212> PRT

<213> Homo sapiens

<400> 3318

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			20					25					30		
Glu	Lys	Arg	Glu	Glu	Arg	Arg	Arg	Arg	Glu	Leu	Glu	Lys	Lys	Arg	Leu

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50	55	60
Lys Glu Thr Asp Lys Gln Lys Lys	Ile Ala Glu Lys Glu Val Arg Ile	
65	70	75
Lys Leu Leu Lys Lys Pro Glu Lys Gly Glu Glu Pro Thr Thr Glu Lys		80
85	90	95
Pro Lys Glu Arg Gly Glu Glu Ile Asp Thr Gly Gly Gly Lys Gln Glu		
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Ser Cys Ala Pro Gly Ala Val Val Lys Ala Arg Pro Met Glu Gly Ser		
115	120	125
Leu Glu Glu Pro Gln Glu Thr Ser His Ser Gly Ser Asp Lys Glu His		
130	135	140
Arg Asp Val Glu Arg Ser Gln Glu Gln Glu Ser Glu Ala Gln Arg Tyr		
145	150	155
His Val Asp Asp Gly Arg Arg His Arg Ala His His Glu Pro Glu Arg		160
165	170	175
Leu Ser Arg Arg Ser Glu Asp Glu Gln Arg Trp Gly Lys Gly Pro Gly		
180	185	190
Gln Asp Arg Gly Lys Lys Gly Ser Gln Asp Ser Gly Ala Pro Gly Glu		
195	200	205
Ala Met Glu Arg Leu Gly Arg Ala Gln Arg Cys Asp Asp Ser Pro Ala		
210	215	220
Pro Arg Lys Glu Arg Leu Ala Asn Lys Val Phe Ile Lys Pro Lys Lys		
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<210> 3319

<211> 1541

<212> DNA

<213> Homo sapiens

<400> 3319

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<210> 3320

<211> 256

<212> PRT

<213> Homo sapiens

<400> 3320

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			20				25						30		
Glu	Tyr	Val	Arg	Trp	Met	Met	Tyr	Trp	Ile	Val	Phe	Ala	Leu	Phe	Met
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		50				55					60				
Tyr	Glu	Ile	Lys	Met	Ala	Phe	Val	Leu	Trp	Leu	Leu	Ser	Pro	Tyr	Thr
65				70					75					80	
Lys	Gly	Ala	Ser	Leu	Leu	Tyr	Arg	Lys	Phe	Val	His	Pro	Ser	Leu	Ser
			85						90					95	
Arg	His	Glu	Lys	Glu	Ile	Asp	Ala	Tyr	Ile	Val	Gln	Ala	Lys	Glu	Arg
		100						105					110		
Ser	Tyr	Glu	Thr	Val	Leu	Ser	Phe	Gly	Lys	Arg	Gly	Leu	Asn	Ile	Ala

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Gly Arg Leu Arg Ser Phe Ser Met Gln Asp Leu Arg Ser Ile Ser Asp		
145	150	155
Ala Pro Ala Pro Ala Tyr His Asp Pro Leu Tyr Leu Glu Asp Gln Val		
165	170	175
Ser His Arg Arg Pro Pro Ile Gly Tyr Arg Ala Gly Gly Leu Gln Asp		
180	185	190
Ser Asp Thr Glu Asp Glu Cys Trp Ser Asp Thr Glu Ala Val Pro Arg		
195	200	205
Ala Pro Ala Arg Pro Arg Glu Lys Pro Leu Ile Arg Ser Gln Ser Leu		
210	215	220
Arg Val Val Lys Arg Lys Pro Pro Val Arg Glu Gly Thr Ser Arg Ser		
225	230	235
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<210> 3321

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 3321

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 900

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<210> 3322

<211> 454

<212> PRT

<213> Homo sapiens

<400> 3322

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 35 40 45
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 Leu Arg Leu Tyr Pro Pro Asp Asn Ala Pro Leu Ala Phe Ser Ser Lys
 65 70 75 80
 Val Cys Tyr Val Lys Phe Arg Asp Pro Ser Ser Val Gly Val Ala Gln
 85 90 95
 His Leu Thr Asn Thr Val Phe Ile Asp Arg Ala Leu Ile Val Val Pro
 100 105 110
 Cys Ala Glu Gly Lys Ile Pro Glu Glu Ser Lys Ala Leu Ser Leu Leu
 115 120 125
 Ala Pro Ala Pro Thr Met Thr Ser Leu Met Pro Gly Ala Gly Leu Leu
 130 135 140
 Pro Ile Pro Thr Pro Asn Pro Leu Thr Thr Leu Gly Val Ser Leu Ser
 145 150 155 160
 Ser Leu Gly Ala Ile Pro Ala Ala Ala Leu Asp Pro Asn Ile Ala Thr
 165 170 175
 Leu Gly Glu Ile Pro Gln Pro Pro Leu Met Gly Asn Val Asp Pro Ser
 180 185 190
 Lys Ile Asp Glu Ile Arg Arg Thr Val Tyr Val Gly Asn Leu Asn Ser

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 210              215              220
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 225              230              235              240
Val Lys Pro Pro Glu Met Thr Pro Gln Ala Ala Lys Glu Leu Glu
      245              250              255
Glu Val Met Lys Arg Val Arg Glu Ala Gln Ser Phe Ile Ser Ala Ala
 260              265              270
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<210> 3330

<211> 235

<212> PRT

<213> Homo sapiens

<400> 3330

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		20						25				30			
Asn	Ser	Thr	Phe	Ala	Trp	Phe	Trp	Asn	Asp	Arg	Arg	Leu	His	Ala	Glu
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Pro	Val	Pro	Thr	Leu	Ala	Phe	Thr	His	Val	Ala	Arg	Ala	Gln	Ala	Gly
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Met	Tyr	His	Cys	Leu	Ala	Glu	Leu	Pro	Thr	Gly	Ala	Ala	Ala	Ser	Ala
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Pro	Val	Met	Leu	Arg	Val	Leu	Tyr	Pro	Pro	Lys	Thr	Pro	Thr	Met	Met
		85						90					95		
Val	Phe	Val	Glu	Pro	Glu	Gly	Gly	Leu	Arg	Gly	Ile	Leu	Asp	Cys	Arg
		100					105					110			
Val	Asp	Ser	Glu	Pro	Leu	Ala	Ser	Leu	Thr	Leu	His	Leu	Gly	Ser	Arg
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Leu	Val	Ala	Ser	Ser	Gln	Pro	Gln	Gly	Ala	Pro	Ala	Glu	Pro	His	Ile
	130				135				140						
His	Val	Leu	Ala	Ser	Pro	Asn	Ala	Leu	Arg	Val	Asp	Ile	Glu	Ala	Leu
145				150					155				160		
Arg	Pro	Ser	Asp	Gln	Gly	Glu	Tyr	Ile	Cys	Ser	Ala	Ser	Asn	Val	Leu
		165				170						175			
Gly	Ser	Ala	Ser	Thr	Ser	Thr	Tyr	Phe	Gly	Val	Arg	Ala	Leu	His	Arg
	180					185						190			
Leu	His	Gln	Phe	Gln	Gln	Leu	Leu	Trp	Val	Leu	Gly	Leu	Leu	Val	Gly
	195				200							205			
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<210> 3331

<211> 1644

<212> DNA

<213> Homo sapiens

<400> 3331

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240
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360
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420
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<210> 3332
<211> 128
<212> PRT
<213> Homo sapiens

<400> 3332
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Ile Lys Ile Pro Gly Cys Arg Lys Gln Gly Leu Val His Arg Thr His
35 40 45
Met Ser Ser Cys Arg Val Asp Lys Pro Ser Glu Ile Val Asp Val Gly
50 55 60
Asp Lys Val Trp Val Lys Leu Ile Gly Arg Glu Met Lys Asn Asp Arg
65 70 75 80
Ile Lys Val Ser Leu Ser Met Lys Val Val Asn Gln Gly Thr Gly Lys
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<210> 3333
<211> 2422
<212> DNA
<213> Homo sapiens

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2280

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<210> 3334
 <211> 672
 <212> PRT
 <213> Homo sapiens

<400> 3334
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 Ile Tyr Glu Ala Gly Ala Gly Asp Arg Met Ala Gly Ala Pro Met Ala
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 Ala Ala Val Gln Pro Ala Glu Val Thr Val Glu Val Gly Glu Asp Leu
 35 40 45
 His Met His His Val Arg Asp Arg Glu Met Pro Glu Ala Leu Glu Phe
 50 55 60
 Asn Leu Ser Ala Asn Pro Glu Ser Ser Thr Ile Phe Gln Arg Asn Ser
 65 70 75 80
 Gln Thr Glu Ala Leu Glu Phe Asn Pro Ser Ala Asn Pro Glu Ala Ser
 85 90 95
 Thr Ile Phe Gln Arg Asn Ser Gln Thr Asp Val Val Glu Ile Arg Arg
 100 105 110
 Ser Asn Cys Thr Asn His Val Ser Ala Val Arg Phe Ser Gln Gln Tyr
 115 120 125
 Ser Leu Cys Ser Thr Ile Phe Leu Asp Asp Ser Thr Ala Ile Gln His
 130 135 140
 Tyr Leu Thr Met Thr Ile Ile Ser Val Thr Leu Glu Ile Pro His His
 145 150 155 160
 Ile Thr Gln Arg Asp Ala Asp Arg Thr Leu Ser Ile Pro Asp Glu Gln
 165 170 175
 Leu His Ser Phe Ala Val Ser Thr Val His Ile Met Lys Lys Arg Asn
 180 185 190
 Gly Gly Gly Ser Leu Asn Asn Tyr Ser Ser Ser Ile Pro Ser Thr Pro
 195 200 205
 Ser Thr Ser Gln Glu Asp Pro Gln Phe Ser Val Pro Pro Thr Ala Asn
 210 215 220
 Thr Pro Thr Pro Val Cys Lys Arg Ser Met Arg Trp Ser Asn Leu Phe
 225 230 235 240
 Thr Ser Glu Lys Gly Ser His Pro Asp Lys Glu Arg Lys Ala Pro Glu
 245 250 255
 Asn His Ala Asp Thr Ile Gly Ser Gly Arg Ala Ile Pro Ile Lys Gln
 260 265 270
 Gly Met Leu Leu Lys Arg Ser Gly Lys Trp Leu Lys Thr Trp Lys Lys
 275 280 285
 Lys Tyr Val Thr Leu Cys Ser Asn Gly Met Leu Thr Tyr Tyr Ser Ser
 290 295 300
 Leu Gly Asp Tyr Met Lys Asn Ile His Lys Lys Glu Ile Asp Leu Gln
 305 310 315 320
 Thr Ser Thr Ile Lys Val Pro Gly Lys Trp Pro Ser Leu Ala Thr Ser

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          325              330              335
Ala Cys Thr Pro Ile Ser Ser Ser Lys Ser Asn Gly Leu Ser Lys Asp
          340              345              350
Met Asp Thr Gly Leu Gly Asp Ser Ile Cys Phe Ser Pro Ser Ile Ser
          355              360              365
Ser Thr Thr Ser Pro Lys Leu Asn Pro Pro Ser Pro His Ala Asn
          370              375              380
Lys Lys Lys His Leu Lys Lys Lys Ser Thr Asn Asn Phe Met Ile Val
          385              390              395
Ser Ala Thr Gly Gln Thr Trp His Phe Glu Ala Thr Thr Tyr Glu Glu
          405              410              415
Arg Asp Ala Trp Val Gln Ala Ile Gln Ser Gln Ile Leu Ala Ser Leu
          420              425              430
Gln Ser Cys Glu Ser Ser Lys Ser Lys Ser Gln Leu Thr Ser Gln Ser
          435              440              445
Glu Ala Met Ala Leu Gln Ser Ile Gln Asn Met Arg Gly Asn Ala His
          450              455              460
Cys Val Asp Cys Glu Thr Gln Asn Pro Lys Trp Ala Ser Leu Asn Leu
          465              470              475
Gly Val Leu Met Cys Ile Glu Cys Ser Gly Ile His Arg Ser Leu Gly
          485              490              495
Thr Arg Leu Ser Arg Val Arg Ser Leu Glu Leu Asp Asp Trp Pro Val
          500              505              510
Glu Leu Arg Lys Val Met Ser Ser Ile Gly Asn Glu Leu Ala Asn Ser
          515              520              525
Ile Trp Glu Glu Ser Ser Gln Gly Arg Thr Lys Pro Ser Val Asp Ser
          530              535              540
Thr Arg Glu Glu Lys Glu Arg Trp Ile Arg Ser Lys Tyr Glu Glu Lys
          545              550              555
Leu Phe Leu Ala Pro Leu Pro Cys Thr Glu Leu Ser Leu Gly Gln Gln
          565              570              575
Leu Leu Arg Ala Thr Ala Asp Glu Asp Leu Gln Thr Ala Ile Leu Leu
          580              585              590
Leu Ala His Gly Ser Arg Glu Glu Val Asn Glu Thr Cys Gly Glu Gly
          595              600              605
Asp Gly Cys Thr Ala Leu His Leu Ala Cys Arg Lys Gly Asn Val Val
          610              615              620
Leu Ala Gln Leu Leu Ile Trp Tyr Gly Val Asp Val Met Ala Arg Asp
          625              630              635
Ala His Gly Asn Thr Ala Leu Thr Tyr Ala Arg Gln Ala Ser Ser Gln
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Glu Cys Ile Asn Val Leu Leu Gln Tyr Gly Cys Pro Asp Lys Cys Val
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<210> 3335

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3335

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120

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cccagactgc ttgttgaagg ggttgaggtg ggcctgccgg aaacggggcca gcttctcatc
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360
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<210> 3336

<211> 59

<212> PRT

<213> Homo sapiens

<400> 3336

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          20           25           30
Glu Ala Arg Gln Cys Asp Tyr Thr Gly Gln Tyr Tyr Cys Ser Pro Cys
          35           40           45
His Trp Asn Ala Leu Ala Val Ile Pro Ala Arg
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<210> 3337

<211> 679

<212> DNA

<213> Homo sapiens

<400> 3337

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180
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gtgtattagc ttaaccagaa ataagctgga agaggagtgc agtagctctt cagcccccta
360
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420
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480
caaggaaaaa caactttgga tggcaacttc aacaaggtaa ccctcctttc ttcaatggcc
540
agactgatgc cactgacaa tggctttgag atgcttgagc agcagactgt catgtcaaga
600

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 679

<210> 3338
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 3338
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 20 25 30
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 35 40 45
 Arg Val Arg Glu Arg Asp Arg Glu Arg His Arg Asp Arg Gln Arg Pro
 50 55 60
 Lys Gln Lys Arg Gln Thr Ala Lys Thr Lys Gln Asn Gln Cys Lys Leu
 65 70 75 80
 Glu Lys Lys Ile Lys Leu Asn Ile Arg Ala Gly Lys Ser His Leu Leu
 85 90 95
 Arg Ile Thr Pro Val Tyr
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<210> 3339
 <211> 1341
 <212> DNA
 <213> Homo sapiens

<400> 3339
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<210> 3340

<211> 86

<212> PRT

<213> Homo sapiens

<400> 3340

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		20					25					30			
Trp	Ala	Gly	Phe	Ile	Ile	Leu	His	Cys	Glu	Ile	Ala	Leu	Gln	Cys	Ile
		35				40					45				
Thr	Thr	Ala	Arg	Arg	Thr	Tyr	Ile	Tyr	Ile	Tyr	Ile	Lys	Asn	Ile	Ser
	50				55					60					
Asp	Ser	Cys	Ile	Gln	Met	Ser	Lys	Val	Phe	Val	Ala	Thr	Tyr	Tyr	Ile
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<210> 3341

<211> 1132

<212> DNA

<213> Homo sapiens

<400> 3341

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 720
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 780
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<210> 3342

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3342

Met	Lys	Arg	Arg	Ala	Ser	Asp	Arg	Gly	Ala	Gly	Glu	Thr	Ser	Ala	Arg
1				5					10					15	
Ala	Lys	Ala	Leu	Gly	Ser	Gly	Ile	Ser	Gly	Asn	Asn	Ala	Lys	Arg	Ala
			20					25					30		
Gly	Pro	Phe	Ile	Leu	Gly	Pro	Arg	Leu	Gly	Asn	Ser	Pro	Val	Pro	Ser
			35				40					45			
Ile	Val	Gln	Cys	Leu	Ala	Arg	Lys	Asp	Gly	Thr	Asp	Asp	Phe	Tyr	Gln
	50					55				60					
Leu	Lys	Ile	Leu	Thr	Leu	Glu	Glu	Arg	Gly	Asp	Gln	Gly	Ile	Glu	Ser
	65				70				75				80		
Gln	Glu	Glu	Arg	Gln	Gly	Lys	Met	Leu	Leu	His	Thr	Glu	Tyr	Ser	Leu
			85					90					95		
Leu	Ser	Leu	Leu	His	Thr	Gln	Asp	Gly	Val	Val	His	His	His	Gly	Leu

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                100                105                110
Phe Gln Asp Arg Thr Cys Glu Ile Val Glu Asp Thr Glu Ser Ser Arg
                115                120                125
Met Val Lys Lys Met Lys Lys Arg Ile Cys Leu Val Leu Asp Cys Leu
                130                135                140
Cys Ala His Asp Phe Ser Asp Lys Thr Ala Asp Leu Ile Asn Leu Gln
145                150                155                160
His Tyr Val Ile Lys Glu Lys Arg Leu Ser Glu Arg Glu Thr Val Val
                165                170                175
Ile Phe Tyr Asp Val Val Arg Val Val Glu Ala Leu His Gln Lys Asn
                180                185                190
Ile Val His Arg Asp Leu Lys Leu Gly Asn Met Val Leu Asn Lys Arg
                195                200                205
Thr His Arg Ile Thr Ile Thr Asn Phe Cys Leu Gly Lys His Leu Val
                210                215                220
Ser Glu Gly Asp Leu Leu Lys Asp Gln Arg Gly Ser Pro Ala Tyr Ile
225                230                235                240
Ser Pro Asp Val Leu Ser Gly Arg Pro Tyr Arg Gly Lys Pro Ser Asp
                245                250                255
Met Trp Ala Leu Gly Val Val Leu Phe Thr Met Leu Tyr Gly Gln Phe
                260                265                270
Pro Phe Tyr Asp Ser Ile Pro Gln Glu Leu Phe Arg Lys Ile Lys Ala
                275                280                285
Ala Glu Tyr Thr Ile Pro Glu Asp Gly Arg Val Ser Glu Asn Thr Val
                290                295                300
Cys Leu Ile Arg
305

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<210> 3343

<211> 594

<212> DNA

<213> Homo sapiens

<400> 3343

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cgcgctcatga gccaccgcat ggaggggtgtc ggccagctgc cgcctccta cgggcacaac
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cggcctctcc tcagcggcgt gagtgcacc gaggcgcgcc agccggggaa gtgcctccc
120
ttcagcatga actgggtcgt gggcagcgcg gacctggaga ttatcaacgc caccattggg
180
cggaggagct gtgggggccc atcccggctc tgcaagcacg tgctgtctgc acggtgggcg
240
cggctgtatg gcaggctgag cacacggaca cccagccctg gagacacgcc ctccatgtac
300
tgtgaggcca agctgggggc gcacacctac cagtctgtga aacagcagct gttcaaggcc
360
ttcagaaggc ctggcctggg cactggggtg aggaaccac cggagcagca gcagtttcta
420
ctgactctct aggctgcggg ctctggctg ctggagctga gcgggacgct ggagggatgg
480
gaccgtgtct ggggggcgac gtggcgggtc ggccgggttc ctgcattcgt ttactttgg
540
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594

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<210> 3344
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 3344
 Arg Val Met Ser His Arg Met Glu Gly Val Gly Gln Leu Pro Ala Ser
 1 5 10 15
 Tyr Arg His Asn Arg Pro Leu Leu Ser Gly Val Ser Asp Thr Glu Ala
 20 25 30
 Arg Gln Pro Gly Lys Ser Pro Pro Phe Ser Met Asn Trp Val Val Gly
 35 40 45
 Ser Ala Asp Leu Glu Ile Ile Asn Ala Thr Thr Gly Arg Arg Ser Cys
 50 55 60
 Gly Gly Pro Ser Arg Leu Cys Lys His Val Leu Ser Ala Arg Trp Ala
 65 70 75
 Arg Leu Tyr Gly Arg Leu Ser Thr Arg Thr Pro Ser Pro Gly Asp Thr
 85 90 95
 Pro Ser Met Tyr Cys Glu Ala Lys Leu Gly Ala His Thr Tyr Gln Ser
 100 105 110
 Val Lys Gln Gln Leu Phe Lys Ala Phe Gln Lys Ala Gly Leu Gly Thr
 115 120 125
 Trp Val Arg Lys Pro Pro Glu Gln Gln Gln Phe Leu Leu Thr Leu
 130 135 140

<210> 3345
 <211> 1149
 <212> DNA
 <213> Homo sapiens

<400> 3345
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 tgggaggcag ggagcttgagg cccctcagat gggccacgtg cctcgtggg accctcattg
 120
 tcaccgtgag ctctttccaa ggggacgcca ccagtggggg cctgggcagg aggcagctga
 180
 ggtgtttcag gaaaaggctg aagatcaagg ctgtggtgtg aggactaccc acttttaggga
 240
 agtgaaagag gccagcctca cccagacac cccagtgtgg ttgggggaaag ggggtggtcc
 300
 gtggtgagcc tggtagcttg ggactcatcc tggccctgcc tggccctcag gtgggatgct
 360
 atggaatatg atgagaagct ggcctgttcc cggcaggccc acctcaaccc cttcaacaag
 420
 cagtctgggc cgagacagca tagcaggggc cctggggagg aggtcccga cgtcactcct
 480
 gaagaggccc tgcctgagct gcccctggg gagcgggaat tccgctgccc tgaacgcgtg
 540
 atgggactctg gcctgtctga ggaccaattc tcccgcctg tgggtctgtt cctggcctct
 600
 gacgtccagc agctgcggca ggcgatcgag gagtgaagc aggtgattct ggagctgccc
 660

gagcagtcgg agaagcagaa ggatgccgtg gtgcgactca tccacctccg gctgaagctc
 720
 caggagctga aggaccccaa tgaggatgag ccaaaccatcc gagtgctcct tgagcaccgc
 780
 ttttaacaagg agaagagcaa gagcgtcaag cagacctgtg acaagtgtaa caccatcatc
 840
 tggggggctca ttcagacctg gtacacctgc acagggtgtt attaccgctg tcacagtaag
 900
 tgcttgaacc tcattctcaa gccctgtgtg agctccaaag tcagccacca agctgaatac
 960
 gaactgaaca tctgccctga gacagggctg gacagccagg attaccgctg tgccgagtg
 1020
 cgggcgccca tctctctcgc ggggtgtgcc agtgaggcca ggcagtgcca ctataccggc
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 1140
 tgctcgca
 1149

<210> 3346

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3346

Met	Glu	Tyr	Asp	Glu	Lys	Leu	Ala	Arg	Phe	Arg	Gln	Ala	His	Leu	Asn
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Pro	Phe	Asn	Lys	Gln	Ser	Gly	Pro	Arg	Gln	His	Glu	Gln	Gly	Pro	Gly
			20					25					30		
Glu	Glu	Val	Pro	Asp	Val	Thr	Pro	Glu	Glu	Ala	Leu	Pro	Glu	Leu	Pro
		35				40					45				
Pro	Gly	Glu	Pro	Glu	Phe	Arg	Cys	Pro	Glu	Arg	Val	Met	Asp	Leu	Gly
	50				55					60					
Leu	Ser	Glu	Asp	His	Phe	Ser	Arg	Pro	Val	Gly	Leu	Phe	Leu	Ala	Ser
	65			70				75					80		
Asp	Val	Gln	Gln	Leu	Arg	Gln	Ala	Ile	Glu	Glu	Cys	Lys	Gln	Val	Ile
		85						90					95		
Leu	Glu	Leu	Pro	Glu	Gln	Ser	Glu	Lys	Gln	Lys	Asp	Ala	Val	Val	Arg
		100					105					110			
Leu	Ile	His	Leu	Arg	Leu	Lys	Leu	Gln	Glu	Leu	Lys	Asp	Pro	Asn	Glu
	115				120						125				
Asp	Glu	Pro	Asn	Ile	Arg	Val	Leu	Leu	Glu	His	Arg	Phe	Tyr	Lys	Glu
	130			135						140					
Lys	Ser	Lys	Ser	Val	Lys	Gln	Thr	Cys	Asp	Lys	Cys	Asn	Thr	Ile	Ile
	145			150				155						160	
Trp	Gly	Leu	Ile	Gln	Thr	Trp	Tyr	Thr	Cys	Thr	Gly	Cys	Tyr	Tyr	Arg
		165					170						175		
Cys	His	Ser	Lys	Cys	Leu	Asn	Leu	Ile	Ser	Lys	Pro	Cys	Val	Ser	Ser
		180					185					190			
Lys	Val	Ser	His	Gln	Ala	Glu	Tyr	Glu	Leu	Asn	Ile	Cys	Pro	Glu	Thr
	195				200						205				
Gly	Leu	Asp	Ser	Gln	Asp	Tyr	Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile
	210			215				220							
Ser	Leu	Arg	Gly	Val	Pro	Ser	Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly

ctgtctcaaa agaaaaaaaa gtacctgcct caggtaggga ctgaataaac acgtgtaagg
 1320
 cactttggaa aaatacctgg catatatagt aagcagtatg ttggccatta cgaaggcccc
 1380
 tgggaattct gtactgtgc tcatgggtgt agtcggttct agaggggtgg gcaggtggga
 1440
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 1500
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 1560
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 1620
 cacctgtaat ccacattt tgggaggctg aggcggagga ccacctgagg caaggaattc
 1680
 agaaccactc tgggcaacat aatgacacta aaaaagacta tctctaatac aggctagaac
 1740
 caagggaagg ctaagaattg ccagtagctg tgcaactact gaaagcccta cccaaggcca
 1800
 ccagccttgt cttcctcttt cctctgtcag ttcaaaaaga acagaaacct ccagctcttt
 1860
 tacatagcag gtaccaggca tttatcagaa gaggccaaag tctctgttcc catgcagccc
 1920
 tttgaatagt gtgtctaaac aaaaatagggt gtccaagtag tcacactgag actttaactg
 1980
 gtaaccacc ctgtggcgct agtcgcagtg ctctggccaa cactatagca gggcttatcc
 2040
 ttctccctca tgtgtagtga aacaaaatgt aacaccttgg gttcattcag ttccattccc
 2100
 tatgtctacc tgtgtcaata taattccctg atttgaggc agctctctcc attttcccca
 2160
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 2220
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 2267
 <210> 3348
 <211> 288
 <212> PRT
 <213> Homo sapiens

<400> 3348
 Arg Cys Val Thr Cys Ala Met Glu Pro Lys Val Ala Glu Leu Lys Gln
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 Lys Ile Glu Asp Thr Leu Cys Pro Phe Gly Phe Glu Val Tyr Pro Phe
 20 25 30
 Gln Val Ala Trp Tyr Asn Glu Leu Leu Pro Pro Ala Phe His Leu Pro
 35 40 45
 Leu Pro Gly Pro Thr Leu Ala Phe Leu Val Leu Ser Thr Pro Ala Met
 50 55 60
 Phe Asp Arg Ala Leu Lys Pro Phe Leu Gln Ser Cys His Leu Arg Met
 65 70 75 80
 Leu Thr Asp Pro Val Asp Gln Cys Val Ala Tyr His Leu Gly Arg Val
 85 90 95
 Gly Glu Ser Leu Pro Glu Leu Gln Ile Glu Ile Ile Ala Asp Tyr Glu
 100 105 110

```

Val His Pro Asn Arg Arg Pro Lys Ile Leu Ala Gln Thr Ala Ala His
      115              120              125
Val Ala Gly Ala Ala Tyr Tyr Tyr Gln Arg Gln Asp Val Glu Ala Asp
      130              135              140
Pro Trp Gly Asn Gln Arg Ile Ser Gly Val Cys Ile His Pro Arg Phe
      145              150              155              160
Gly Gly Trp Phe Ala Ile Arg Gly Val Val Leu Leu Pro Gly Ile Glu
      165              170              175
Val Pro Asp Leu Pro Pro Arg Lys Pro His Asp Cys Val Pro Thr Arg
      180              185              190
Ala Asp Arg Ile Ala Leu Leu Glu Gly Phe Asn Phe His Trp Arg Asp
      195              200              205
Trp Thr Tyr Arg Asp Ala Val Thr Pro Gln Glu Arg Tyr Ser Glu Glu
      210              215              220
Gln Lys Ala Tyr Phe Ser Thr Pro Pro Ala Gln Arg Leu Ala Leu Leu
      225              230              235              240
Gly Leu Ala Gln Pro Ser Glu Lys Pro Ser Ser Pro Ser Pro Asp Leu
      245              250              255
Pro Phe Thr Thr Pro Ala Pro Lys Lys Pro Gly Asn Pro Ser Arg Ala
      260              265              270
Arg Ser Trp Leu Ser Pro Arg Val Ser Pro Pro Ala Ser Pro Gly Pro
      275              280              285

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<210> 3349

<211> 1132

<212> DNA

<213> Homo sapiens

<400> 3349

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nnaaaatcgg ggcacggtca tcgtggagcg ctggtggaag gtaccgctgg cgggggaggg
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ccggaagccg cgcctgcacc ggcgacatcg cgtctataag ctggtggagg acacgaagca
120
tcggcccaaa gaaaacctgg agctcatcct gacgcagtcg gtggagagta aggcccgggc
180
cgaggcgctt cctctcaggc tgatgttggg gtccgggggtg acctgggtctc agtgaagaaa
240
tccttaggcc ggaatcgact ccttcctcag ggactggctg tatatgcac ccctgaaaaa
300
aagaagctgt ttgaagagga gaaattgctg agacaagaag gaaaattaga gaagatccag
360
accaagcgag gtgaggcgac agtgaaattt ctaaaaagct gtgccttgga ggtagggatg
420
aagaacaatg tcaaatggga gctgaaccct gaaatagtgt cccgccactt cttaagaat
480
cttggtgtgt tggttgcccc acatacatta aagttaccag cagagcctat cacacgggtg
540
ggcgagtatt ggtgtgaggt gacggtaaat gggcttgata ctgtgagagt gcctatgtct
600
gtcgtgaact ttgagaagcc caagaccaa agatataagt actggttagc ccagcaagct
660
gccaaaggcta tggccccccac cagccccccag atctaaatct actctccctc caaggcagca
720

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aagcagaatc gggagcagtg gagcagaaat gtgcaagcac cctgatctca ctcccagctc
 780
 tgaccaata cagaatttta gagaacatct gaagacatca gactgcactg cgtatacatg
 840
 ttgaattctt catttttgcc atctttaact gtcactcactg gggcagggaa gtcctgttcc
 900
 agaagtacca ggctgtagat ttgataagct agatgcagta gaccgaaacc atccaaaacc
 960
 tgttttagctt ctctcctcat tggagtttat tgggacaaac aggagagcca gccattgtct
 1020
 ccagtacttg cctcattctc atcatccaaa ctgaacattt gtatcccaag cagaaataaa
 1080
 gagaatatgt tctttttaaa aaaaaaaaaa aaaaaaaaaa aaaaaaattg gc
 1132

<210> 3350

<211> 174

<212> PRT

<213> Homo sapiens

<400> 3350

Gly	Pro	Gly	Arg	Gly	Ala	Ser	Ser	Gln	Ala	Asp	Val	Gly	Val	Arg	Gly
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Asp	Leu	Val	Ser	Val	Lys	Lys	Ser	Leu	Gly	Arg	Asn	Arg	Leu	Leu	Pro
			20					25					30		
Gln	Gly	Leu	Ala	Val	Tyr	Ala	Ser	Pro	Glu	Asn	Lys	Lys	Leu	Phe	Glu
		35				40						45			
Glu	Glu	Lys	Leu	Leu	Arg	Gln	Glu	Gly	Lys	Leu	Glu	Lys	Ile	Gln	Thr
		50				55					60				
Lys	Ala	Gly	Glu	Ala	Thr	Val	Lys	Phe	Leu	Lys	Ser	Cys	Arg	Leu	Glu
65				70					75					80	
Val	Gly	Met	Lys	Asn	Asn	Val	Lys	Trp	Glu	Leu	Asn	Pro	Glu	Ile	Val
			85					90						95	
Ala	Arg	His	Phe	Phe	Lys	Asn	Leu	Gly	Val	Val	Val	Ala	Pro	His	Thr
			100					105					110		
Leu	Lys	Leu	Pro	Ala	Glu	Pro	Ile	Thr	Arg	Trp	Gly	Glu	Tyr	Trp	Cys
		115				120						125			
Glu	Val	Thr	Val	Asn	Gly	Leu	Asp	Thr	Val	Arg	Val	Pro	Met	Ser	Val
		130				135					140				
Val	Asn	Phe	Glu	Lys	Pro	Lys	Thr	Lys	Arg	Tyr	Lys	Tyr	Trp	Leu	Ala
145				150						155				160	
Gln	Gln	Ala	Ala	Lys	Ala	Met	Ala	Pro	Thr	Ser	Pro	Gln	Ile		
			165							170					

<210> 3351

<211> 1422

<212> DNA

<213> Homo sapiens

<400> 3351

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 120

atgatgctct tagtccaat aattcatggt ggcaagcaca gtgaacgaca tcctgccctc
 180
 gctgctgcgc cgcgatgcgc tgagcgccgc caaggagggt ttgtaccacc tggacateta
 240
 cttcagcagc cagctgcaga gcgcgccgct gcccatcgtg gacaagggcc ccgtggagct
 300
 gctggaggag ttcgtgttcc aggtgcccaa ggagcgcagc gcgcagccca agagactgaa
 360
 ttcccttcag gagcttcaac ttcttgaaat catgtgcaat tatttccagg agcaaaccaa
 420
 ggactctgtt cggcagatta ttttttcate ctttttcagc cctcaaggga acaaagccga
 480
 tgacagccgc atgagcttgt tgggaaaact ggtctccatg gcggtggctg tgtgtcgaat
 540
 cccggtgttg gagtgtgctg cctcctggct tcagcggacg cccgtggttt actgtgtgag
 600
 gttagccaa ggcctttag atgactactg ctgtttgggt ccgggatcca ttcagacgct
 660
 gaagcagata ttcagtgcga gcccgagatt ctgctgccag ttcacacact ccgttacccg
 720
 gctctatgac ctgtcatcag atgacctcat tccacctatg gacttgcctg aaatgattgt
 780
 caccctggatt tttgaggacc caagggtgat tctcatcact tttttaata ctccgattgc
 840
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 900
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 960
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 1080
 gaagaatctg tatgggcgac tggggctgat cctcttcgac cacatggtcc cgctggtaga
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 1320
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<210> 3352

<211> 97

<212> PRT

<213> Homo sapiens

<400> 3352

Met Trp Pro Ser Gln Leu Leu Ile Phe Met Met Leu Leu Ala Pro Ile

1

5

10

15

Ile His Gly Gly Lys His Ser Glu Arg His Pro Ala Leu Ala Ala Ala

```

                20                25                30
Pro Arg Cys Ala Glu Arg Arg Gln Gly Gly Val Val Pro Gly His
      35                40                45
Leu Leu Gln Gln Pro Ala Ala Glu Arg Ala Ala His Arg Gly Gln
      50                55                60
Gly Pro Arg Gly Ala Ala Gly Gly Val Arg Val Pro Gly Ala Gln Gly
      65                70                75                80
Ala Gln Arg Ala Ala Gln Glu Thr Glu Phe Pro Ser Gly Ala Ser Thr
      85                90                95
Ser

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<210> 3353
 <211> 420
 <212> DNA
 <213> Homo sapiens

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<400> 3353
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tttccatctc ctgaccagcc tgccaatgtg cctgtcctcc cacctgccat gaacacgggg
120
ggctccctac ctgacctcac caacctgcac ttccccccac cactgcccac ccccttggac
180
cctgaagaga cagcctaccc tagcctgagt gggggcaaca gtacctccaa ttgacccac
240
accatgactc acctgggcat cagcaggggc atgggccttg gccaggcta tgaatcacca
300
gggcgtcccc ctggatacca gtaaaactgtc cactgaccag cggttacccc catacccata
360
cagttcccca agtttggtn tctgcttacc agccccacac cccaaagttt taacagcagc
420

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<210> 3354
 <211> 107
 <212> PRT
 <213> Homo sapiens

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<400> 3354
Xaa Lys Leu Ser Ser Ser Ser Ser Arg Pro Arg Ser Cys Glu Val Pro
      1                5                10                15
Gly Ile Asn Ile Phe Pro Ser Pro Asp Gln Pro Ala Asn Val Pro Val
      20                25                30
Leu Pro Pro Ala Met Asn Thr Gly Gly Ser Leu Pro Asp Leu Thr Asn
      35                40                45
Leu His Phe Pro Pro Pro Leu Pro Thr Pro Leu Asp Pro Glu Glu Thr
      50                55                60
Ala Tyr Pro Ser Leu Ser Gly Gly Asn Ser Thr Ser Asn Leu Thr His
      65                70                75                80
Thr Met Thr His Leu Gly Ile Ser Arg Gly Met Gly Leu Gly Pro Gly
      85                90                95
Tyr Asp Ala Pro Gly Arg Pro Pro Gly Tyr Gln
      100                105

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<210> 3355
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 3355
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 gtaagattat ctccagccaa aatgtcaacc aagaattcta cagatctagt tgaatatgtt
 120
 gacaagagtc atgcttttct ccccatcatt ccaaacaccc agagagggtca gctagaagac
 180
 agactgaaca accaggcgcg taccatagct ttccttcttg aacaagcctt ccgcatcaag
 240
 gaggacatct ctgcttgctt gcaggggacc catggctttc gaaaagagga atcgctcgcc
 300
 aggaagttac tggaagcca catccagacc atcaccagca tcgtcaaaaa actcagccaa
 360
 aatattgaga ttttagaaga ccaataaga gctcgagatc aggcggccac aggaactaac
 420
 ttgcagtagc acgagataaa catcaaacac ctacaaggag ttgggagatc ttcc
 474

<210> 3356
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 3356
 Met Ser Thr Lys Asn Ser Thr Asp Leu Val Glu Tyr Val Asp Lys Ser
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 Asp Arg Leu Asn Asn Gln Ala Arg Thr Ile Ala Phe Leu Leu Glu Gln
 35 40 45
 Ala Phe Arg Ile Lys Glu Asp Ile Ser Ala Cys Leu Gln Gly Thr His
 50 55 60
 Gly Phe Arg Lys Glu Glu Ser Leu Ala Arg Lys Leu Leu Glu Ser His
 65 70 75 80
 Ile Gln Thr Ile Thr Ser Ile Val Lys Lys Leu Ser Gln Asn Ile Glu
 85 90 95
 Ile Leu Glu Asp Gln Ile Arg Ala Arg Asp Gln Ala Ala Thr Gly Thr
 100 105 110
 Asn Phe Ala Val His Glu Ile Asn Ile Lys His Leu Gln Gly Val Gly
 115 120 125
 Arg Ser Phe
 130

<210> 3357
 <211> 2268
 <212> DNA
 <213> Homo sapiens

<400> 3357

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agcagccatt atggatttgg atgtgctctt tatacccatg tctctaattg cagatggagg
120
agggccctata aaaataattc cttcttgctt acaaagttca gcaaattcca tgttttctga
180
aagaaaaaccg catcctggat ggatagcctg tgcagcagag gtcttgGCCa cttgaatgat
240
tttctccata gataggtagc tctgctggga ggaacgggtt tggcggtgag gacgcagctg
300
cctctgtact ggggagtcac ggagtggcgg ggctccaggg acatggcggc ggcctctgcg
360
gtgtcggtgc tgctggtggc ggcggagagg aaccgggtgc atcgctctcc gagcctgctc
420
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1620

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<210> 3358

<211> 493

<212> PRT

<213> Homo sapiens

<400> 3358

Gln	Thr	Val	Ala	Val	Tyr	Ser	Glu	Ala	Asp	Arg	Asn	Ser	Met	His	Val
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Asp	Met	Ala	Asp	Glu	Ala	Tyr	Ser	Ile	Gly	Pro	Ala	Pro	Ser	Gln	Gln
			20					25				30			
Ser	Tyr	Leu	Ser	Met	Glu	Lys	Ile	Ile	Gln	Val	Ala	Lys	Thr	Ser	Ala
		35				40					45				
Ala	Gln	Ala	Ile	His	Pro	Gly	Cys	Gly	Phe	Leu	Ser	Glu	Asn	Met	Glu
		50				55				60					
Phe	Ala	Glu	Leu	Cys	Lys	Gln	Glu	Gly	Ile	Ile	Phe	Ile	Gly	Pro	Pro
65				70					75					80	
Pro	Ser	Ala	Ile	Arg	Asp	Met	Gly	Ile	Lys	Ser	Thr	Ser	Lys	Ser	Ile
				85					90					95	
Met	Ala	Ala	Ala	Gly	Val	Pro	Val	Val	Glu	Gly	Tyr	His	Gly	Glu	Asp
			100					105					110		
Gln	Ser	Asp	Gln	Cys	Leu	Lys	Glu	His	Ala	Arg	Arg	Ile	Gly	Tyr	Pro
		115				120						125			
Val	Met	Ile	Lys	Ala	Val	Arg	Gly	Gly	Gly	Lys	Gly	Met	Arg	Ile	
		130				135				140					
Val	Arg	Ser	Glu	Gln	Glu	Phe	Gln	Glu	Gln	Leu	Glu	Ser	Ala	Arg	Arg
145				150						155				160	
Glu	Ala	Lys	Lys	Ser	Phe	Asn	Asp	Asp	Ala	Met	Leu	Ile	Glu	Lys	Phe
				165					170					175	
Val	Asp	Thr	Pro	Arg	His	Val	Glu	Val	Gln	Val	Phe	Gly	Asp	His	His
			180					185					190		
Gly	Asn	Ala	Val	Tyr	Leu	Phe	Glu	Arg	Asp	Cys	Ser	Val	Gln	Arg	Arg

		195					200				205				
His	Gln	Lys	Ile	Ile	Glu	Glu	Ala	Pro	Ala	Pro	Gly	Ile	Lys	Ser	Glu
	210					215					220				
Val	Arg	Lys	Lys	Leu	Gly	Glu	Ala	Ala	Val	Arg	Ala	Ala	Lys	Ala	Val
225					230					235					240
Asn	Tyr	Val	Gly	Ala	Gly	Thr	Val	Glu	Phe	Ile	Met	Asp	Ser	Lys	His
				245					250					255	
Asn	Phe	Cys	Phe	Met	Glu	Met	Asn	Thr	Arg	Leu	Gln	Val	Glu	His	Pro
			260					265					270		
Val	Thr	Glu	Met	Ile	Thr	Gly	Thr	Asp	Leu	Val	Glu	Trp	Gln	Leu	Arg
		275					280				285				
Ile	Ala	Ala	Gly	Glu	Lys	Ile	Pro	Leu	Ser	Gln	Glu	Glu	Ile	Thr	Leu
	290					295					300				
Gln	Gly	His	Ala	Phe	Glu	Ala	Arg	Ile	Tyr	Ala	Glu	Asp	Pro	Ser	Asn
305				310						315					320
Asn	Phe	Met	Pro	Val	Ala	Gly	Pro	Leu	Val	His	Leu	Ser	Thr	Pro	Arg
			325					330						335	
Ala	Asp	Pro	Ser	Thr	Arg	Ile	Glu	Thr	Gly	Val	Arg	Gln	Gly	Asp	Glu
			340				345						350		
Val	Ser	Val	His	Tyr	Asp	Pro	Met	Ile	Ala	Lys	Leu	Val	Val	Trp	Ala
		355					360				365				
Ala	Asp	Arg	Gln	Ala	Ala	Leu	Thr	Lys	Leu	Arg	Tyr	Ser	Leu	Arg	Gln
	370				375						380				
Tyr	Asn	Ile	Val	Gly	Leu	His	Thr	Asn	Ile	Asp	Phe	Leu	Leu	Asn	Leu
385				390					395						400
Ser	Gly	His	Pro	Glu	Phe	Glu	Ala	Gly	Asn	Val	His	Thr	Asp	Phe	Ile
			405					410						415	
Pro	Gln	His	His	Lys	Gln	Leu	Leu	Ser	Arg	Lys	Ala	Ala	Ala	Lys	
		420					425					430			
Glu	Ser	Leu	Cys	Gln	Ala	Ala	Leu	Gly	Leu	Ile	Leu	Lys	Glu	Lys	Ala
		435				440					445				
Met	Thr	Asp	Thr	Phe	Thr	Leu	Gln	Ala	His	Asp	Gln	Phe	Ser	Pro	Phe
	450				455					460					
Ser	Ser	Ser	Ser	Gly	Arg	Arg	Leu	Asn	Ile	Ser	Tyr	Thr	Arg	Asn	Met
465				470					475						480
Thr	Leu	Lys	Asp	Gly	Lys	Asn	Ser	Phe	Arg	Leu	Leu	Gly			
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<210> 3359

<211> 652

6212 DNA

<213> Homo sapiens

<400> 3359

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120
ggctagacag ttactgtctc agctctagga tgtgcgttct tccactagaa gctcttctga
180
gggagggtaat taaaaaacag tggaatggaa aaacagtgtc gtagtcatcc tgtaatatgc
240
tccttgctaa caatgtatac attcctgtcta ggtgccatat tcattgcctt aagctcaagt
300

cgcacatcttac tagtgaagta ttctgccaat gaagaaaaa agtatgatta tcttccaact
 360
 actgtgaatg tgtgctcaga actgggtgaag ctagtgttct gtgtgcttgt gtcattctgt
 420
 gttataaaga aagatcatca aagtagaaat ttgaaatag ctctcctggaa ggaattctct
 480
 gatttcatga agtgggtccat tcttgccttt ctttatttcc tggataactt gattgtcttc
 540
 tatgtctctg cctatcttca accagccatg gctgttatct tctcaaatat tagcattata
 600
 acaacagctc ttctattcag gatagtgcgt aagaggcgct taaactggat cc
 652

<210> 3360

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3360

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 20 25 30
 Arg Ile Leu Leu Val Lys Tyr Ser Ala Asn Glu Glu Asn Lys Tyr Asp
 35 40 45
 Tyr Leu Pro Thr Thr Val Asn Val Cys Ser Glu Leu Val Lys Leu Val
 50 55 60
 Phe Cys Val Leu Val Ser Phe Cys Val Ile Lys Lys Asp His Gln Ser
 65 70 75 80
 Arg Asn Leu Lys Tyr Ala Ser Trp Lys Glu Phe Ser Asp Phe Met Lys
 85 90 95
 Trp Ser Ile Pro Ala Phe Leu Tyr Phe Leu Asp Asn Leu Ile Val Phe
 100 105 110
 Tyr Val Leu Ser Tyr Leu Gln Pro Ala Met Ala Val Ile Phe Ser Asn
 115 120 125
 Phe Ser Ile Ile Thr Thr Ala Leu Leu Phe Arg Ile Val Leu Lys Arg
 130 135 140
 Arg Leu Asn Trp Ile
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<210> 3361

<211> 1040

<212> DNA

<213> Homo sapiens

<400> 3361

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 120
 ggagtcgcct gcgcgcgcag cggaggccag tgcgccggcg catagcgagc ccgggtctgt
 180
 gatcgccgag cggggagtga agatagtcca agtcctaaga gacagcgctt ctctcattca
 240

gtctttgatt atacatcagc atcaccagct ccctcaccac caatgcgacc atgggagatg
 300
 acatcaaata ggcagccccc ttcagttcga ccaagccaac atcattcttc aggggaacga
 360
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 480
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 600
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 660
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 720
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 780
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 840
 gatccatttc ttatacatcc tcttcacett tctccccatc atcctcctca tttgccacca
 900
 ccaggccagt ttgtcccttt ccaaacacag caatcacgat cgcctctgca aaggatagaa
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<210> 3362

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3362

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Pro	Ser	Gln	His	His	Phe	Ser	Gly	Glu	Arg	Cys	Asn	Thr	Pro	Ala	Arg
			20					25				30			
Asn	Arg	Arg	Ser	Pro	Pro	Val	Arg	Arg	Gln	Arg	Gly	Arg	Arg	Asp	Arg
			35				40					45			
Leu	Ser	Arg	His	Asn	Ser	Ile	Ser	Gln	Asp	Glu	Asn	Tyr	His	His	Leu
			50			55				60					
Pro	Tyr	Ala	Gln	Gln	Gln	Ala	Ile	Glu	Glu	Pro	Arg	Ala	Phe	His	Pro
65					70				75					80	
Pro	Asn	Val	Ser	Pro	Arg	Leu	Leu	His	Pro	Ala	Ala	His	Pro	Pro	Gln
				85				90						95	
Gln	Asn	Ala	Val	Met	Val	Asp	Ile	His	Asp	Gln	Leu	His	Gln	Gly	Thr
			100				105						110		
Val	Pro	Val	Ser	Tyr	Thr	Val	Thr	Thr	Val	Ala	Pro	His	Gly	Ile	Pro
			115				120					125			
Leu	Cys	Thr	Gly	Gln	His	Ile	Pro	Ala	Cys	Ser	Thr	Gln	Gln	Val	Pro
			130			135					140				
Gly	Cys	Ser	Val	Val	Phe	Ser	Gly	Gln	His	Leu	Pro	Val	Cys	Ser	Val

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145          150          155          160
Pro Pro Pro Met Leu Gln Ala Cys Ser Val Gln His Leu Pro Val Pro
          165          170          175
Tyr Ala Ala Phe Pro Pro Leu Ile Ser Ser Asp Pro Phe Leu Ile His
          180          185          190
Pro Pro His Leu Ser Pro His His Pro Pro His Leu Pro Pro Gly
          195          200          205
Gln Phe Val Pro Phe Gln Thr Gln Gln Ser Arg Ser Pro Leu Gln Arg
          210          215          220
Ile Glu Asn Glu Val Glu Leu Leu Gly Glu His Leu Pro Gly Ala His
225          230          235          240
Pro Gln His Pro His Leu Leu Ile Asn Ile Ser Thr
          245          250

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<210> 3363

<211> 718

<212> DNA

<213> Homo sapiens

<400> 3363

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120
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180
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240
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300
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360
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420
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600
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<210> 3364

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3364

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1          5          10          15
Ala Leu Gln Ala Thr His Pro Pro Ala Ala His Gly Gly Pro Gly Thr

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	20		25		30
Pro	Gly	Leu	Leu	Met	Glu
Thr	Phe	Thr	Asp	Cys	Gln
Lys	Glu	Ser	Pro	Thr	Val
Ser	Gly	Ser	Asn	Cys	Thr
Ser	Gly	Leu	Phe	Arg	Cys
Gly	Gly	Arg	Gly	Gly	Arg
Thr	Pro	Glu	Leu	Leu	Gly
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Ser	Trp	Ala			

<210> 3365

<211> 2389

<212> DNA

<213> Homo sapiens

<400> 3365

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120
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240
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720
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780
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1020
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1080
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1140
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2160
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2280
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<210> 3366

<211> 624

<212> PRT

<213> Homo sapiens

<400> 3366

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Trp Thr Asn Tyr Ile His Gly Trp Gln Asp Arg Trp Val Val Leu Lys
35      40      45
Asn Asn Ala Leu Ser Tyr Tyr Lys Ser Glu Asp Glu Thr Glu Tyr Gly
50      55      60
Cys Arg Gly Ser Ile Cys Leu Ser Lys Ala Val Ile Thr Pro His Asp
65      70      75      80
Phe Asp Glu Cys Arg Phe Asp Ile Ser Val Asn Asp Ser Val Trp Tyr
85      90      95
Leu Arg Ala Gln Asp Pro Asp His Arg Gln Gln Trp Ile Asp Ala Ile
100     105     110
Glu Gln His Lys Thr Glu Ser Gly Tyr Gly Ser Glu Ser Ser Leu Arg
115     120     125
Arg His Gly Ser Met Val Ser Leu Val Ser Gly Ala Ser Gly Tyr Ser
130     135     140
Ala Thr Ser Thr Ser Ser Phe Lys Lys Gly His Ser Leu Arg Glu Lys
145     150     155     160
Leu Ala Glu Met Glu Thr Phe Arg Asp Ile Leu Cys Arg Gln Val Asp
165     170     175
Thr Leu Gln Lys Tyr Phe Asp Ala Cys Ala Asp Ala Val Ser Lys Asp
180     185     190
Glu Leu Gln Arg Asp Lys Val Val Glu Asp Asp Glu Asp Asp Phe Pro
195     200     205
Thr Thr Arg Ser Asp Gly Asp Phe Leu His Ser Thr Asn Gly Asn Lys
210     215     220
Glu Lys Leu Phe Pro His Val Thr Pro Lys Gly Ile Asn Gly Ile Asp
225     230     235     240
Phe Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu
245     250     255
Ala Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser
260     265     270
Trp Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu
275     280     285
Glu Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe
290     295     300
Gly Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu
305     310     315     320
Glu Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile
325     330     335
Glu Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser
340     345     350
Leu Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val
355     360     365
Gln Lys Pro Tyr Ser Arg Ser Ser Ser Met Ser Ser Ile Asp Leu Val
370     375     380
Ser Ala Ser Asp Asp Val His Arg Phe Ser Ser Gln Val Glu Glu Met

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Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp Val Gly Gly Asp Ala
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Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met Lys Val Tyr Arg Arg
420          425          430
Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro Leu Lys Ala Thr His
435          440          445
Ala Val Lys Gly Val Thr Gly His Glu Val Cys Asn Tyr Phe Trp Asn
450          455          460
Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile Glu Asn Phe His Val
465          470          475          480
Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Tyr Gln Thr His Lys
485          490          495
Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu Tyr Leu Ser Val Ile
500          505          510
Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro Glu Thr Trp Ile Val
515          520          525
Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro Leu Asn Asn Arg Cys
530          535          540
Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys Gln Thr Leu Val Ser
545          550          555          560
Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp Asn Ile Leu Cys Lys
565          570          575
Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly Trp Ala Pro Ala Ser
580          585          590
Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro Lys Phe Leu Lys Arg
595          600          605
Phe Thr Ser Tyr Val Gln Glu Lys Thr Ala Gly Lys Pro Ile Leu Phe
610          615          620

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<210> 3367

<211> 366

<212> DNA

<213> Homo sapiens

<400> 3367

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120
tgccctcccc acttcaggcc tcttagtgtc aaggatgtga gaggcaaggg ctgctgggag
180
agtattttac ggactgaagg aggcgtgccg cctgccctgc cctcctactg gtggagggaag
240
gaggtgctgg gagccccaca actcagggcc ccccgacgcc cagtaaggcc actgtacacc
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<210> 3368

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3368

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             20             25             30
Lys Asp Val Arg Gly Lys Gly Cys Trp Glu Ser Ile Leu Arg Thr Glu
             35             40             45
Gly Gly Val Pro Pro Ala Leu Pro Ser Tyr Trp Trp Arg Lys Glu Val
             50             55             60
Leu Gly Ala Pro Gln Leu Arg Ala Pro Arg Arg Pro Val Arg Pro Leu
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Tyr Thr Pro Pro Asp Pro Asp His Asn Gln Pro Pro Ile Val Leu Leu
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Thr Leu Phe Pro Ser Gly Thr Arg
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<210> 3369

<211> 1405

<212> DNA

<213> Homo sapiens

<400> 3369

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aagggtttat ataatgccaa taaaaatgat gattatgaca acgaggagat cttaacctat
180
gaggaaatgt cactttatca tcagccagca aataggaaga gacctatcat cttgattggt
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360
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480
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540
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gcattattgg ccaaagaagg caagaatcca aagcctgaag agttgagaga aatcattgag
660
aagacaagag agatggagca gaacaatggc cactactttg atacggcaat tgtgaattcc
720
gatcttgata aagcctatca ggaattgctt aggttaatta acaaacttga tactgaaacct
780
cagtggtgtac catccacttg gctgaggtga aagaacatc cattctgtgg catgttgagc
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900

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 1080
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 1140
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 1260
 actgggcaag gcagtatttg cttaggaaac taatttagtc atcagagata ctttccctaaa
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 1380
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<210> 3370

<211> 269

<212> PRT

<213> Homo sapiens

<400> 3370

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			20					25					30		
Lys	Lys	Asn	Lys	Lys	Lys	Arg	Lys	Lys	Val	Leu	Tyr	Asn	Ala	Asn	Lys
		35					40					45			
Asn	Asp	Asp	Tyr	Asp	Asn	Glu	Glu	Ile	Leu	Thr	Tyr	Glu	Glu	Met	Ser
		50			55					60					
Leu	Tyr	His	Gln	Pro	Ala	Asn	Arg	Lys	Arg	Pro	Ile	Ile	Leu	Ile	Gly
65					70					75				80	
Pro	Gln	Asn	Cys	Gly	Gln	Asn	Glu	Leu	Arg	Gln	Arg	Leu	Met	Asn	Lys
			85					90						95	
Glu	Lys	Asp	Arg	Phe	Ala	Ser	Ala	Val	Pro	His	Thr	Thr	Arg	Ser	Arg
			100					105					110		
Arg	Asp	Gln	Glu	Val	Ala	Gly	Arg	Asp	Tyr	His	Phe	Val	Ser	Arg	Gln
		115				120						125			
Ala	Phe	Glu	Ala	Asp	Ile	Ala	Ala	Gly	Lys	Phe	Ile	Glu	His	Gly	Glu
		130				135					140				
Phe	Glu	Lys	Asn	Leu	Tyr	Gly	Thr	Ser	Ile	Asp	Ser	Val	Arg	Gln	Val
145			150						155					160	
Ile	Asn	Ser	Gly	Lys	Ile	Cys	Leu	Leu	Ser	Leu	Arg	Thr	Gln	Ser	Leu
			165					170						175	
Lys	Thr	Leu	Arg	Asn	Ser	Asp	Leu	Lys	Pro	Tyr	Ile	Ile	Phe	Ile	Ala
		180					185						190		
Pro	Pro	Ser	Gln	Glu	Arg	Leu	Arg	Ala	Leu	Leu	Ala	Lys	Glu	Gly	Lys
		195					200					205			
Asn	Pro	Lys	Pro	Glu	Glu	Leu	Arg	Glu	Ile	Ile	Glu	Lys	Thr	Arg	Glu
		210			215						220				
Met	Glu	Gln	Asn	Asn	Gly	His	Tyr	Phe	Asp	Thr	Ala	Ile	Val	Asn	Ser


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225                230                235                240
Asp Leu Asp Lys Ala Tyr Gln Glu Leu Leu Arg Leu Ile Asn Lys Leu
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Asp Thr Glu Pro Gln Trp Val Pro Ser Thr Trp Leu Arg
                260                265

<210> 3371
<211> 790
<212> DNA
<213> Homo sapiens

<400> 3371
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120
ggtttcaaaa gtccggtggc ctggggctgt atggtcccac cccctggggg gggtgaggaa
180
gttgctgtcg tctgaggtac tgccgtacgt gtagtcctgg tccccgtttt tgccctggcc
240
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300
cgattccgac aagagacggg gcacccttca ttgcaaagag atttccccag atcctttctc
360
cttgatctac caaactttcc agatctttcc aaagctgata tcaatgggca gaatccaaat
420
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480
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540
tccctgtcct tgccagggc aaacagcggg gaccaggact acaagtacga cagtacctca
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660
acttttgaaa ccaaagatca gccagaatat gattccacag atggcgaggg tgactggagt
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<210> 3372
<211> 198
<212> PRT
<213> Homo sapiens

<400> 3372
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Glu Ala Pro Arg Glu His Leu Asp His Gln Ala Ala His Gln Pro Phe
20 25 30
Pro Arg Pro Arg Phe Arg Gln Glu Thr Gly His Pro Ser Leu Gln Arg
35 40 45
Asp Phe Pro Arg Ser Phe Leu Leu Asp Leu Pro Asn Phe Pro Asp Leu

```

50	55	60
Ser Lys Ala Asp Ile Asn Gly Gln Asn Pro Asn Ile Gln Val Thr Ile		
65	70	75
Glu Val Val Asp Gly Pro Asp Ser Glu Ala Asp Lys Asp Gln His Pro		80
	85	90
Glu Asn Lys Pro Ser Trp Ser Val Pro Ser Pro Asp Trp Arg Ala Trp		95
	100	105
Trp Gln Arg Ser Leu Ser Leu Ala Arg Ala Asn Ser Gly Asp Gln Asp		110
	115	120
Tyr Lys Tyr Asp Ser Thr Ser Asp Ser Asn Phe Leu Asn Pro Pro		125
	125	130
Arg Gly Trp Asp His Thr Ala Pro Gly His Arg Thr Phe Glu Thr Lys		135
	140	145
Asp Gln Pro Glu Tyr Asp Ser Thr Asp Gly Glu Gly Asp Trp Ser Leu		150
	155	160
Trp Ser Val Cys Ser Val Thr Cys Gly Asn Gly Asn Gln Lys Arg Thr		165
	170	175
Arg Ser Cys Gly Tyr Ala		180
	185	190
195		

<210> 3373

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3373

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 480
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 gtcttgggat cctgcagggg gagggggcgtg tgaatgtgcg ggttgtgtgt agacgtgggt
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 720
 atgcat
 726

<210> 3374

<211> 84
 <212> PRT
 <213> Homo sapiens

<400> 3374
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 Phe His His Gln His Val Leu Ile Ser Arg Phe Leu Cys Leu Lys Asn
 20 25 30
 Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro
 35 40 45
 Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile
 50 55 60
 Trp Phe Leu Leu Leu Ala Val Asp Gly Cys Val Leu Gly Ser Cys Arg
 65 70 75 80
 Gly Arg Gly Leu

<210> 3375
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 3375
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 120
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 240
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<210> 3376
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 3376
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 Ala His Thr Leu Ser Thr His Thr Pro Ser Cys Arg Leu Ser Pro Thr
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 Pro Glu Pro Pro Ala Trp Ala Leu Gly Ala Gln Pro Ala Trp Gly Ala
 35 40 45
 Pro Gly Ser Ser Trp Pro Arg Leu Ala Leu Lys Ser Arg Pro Gly Cys
 50 55 60
 Arg Ala Arg Ser Ala Ala Ser Gly Ala Pro Gly Thr Val Arg Ser Pro

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1320
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1380
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<210> 3378

<211> 970

<212> PRT

<213> Homo sapiens

<400> 3378

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			20					25					30		
Thr	Gln	Ile	Gly	Gln	Tyr	Gly	Asn	Gly	Leu	Lys	Ser	Gly	Ser	Met	Arg
		35					40					45			
Ile	Gly	Lys	Asp	Phe	Ile	Leu	Phe	Thr	Lys	Lys	Glu	Asp	Thr	Met	Thr
		50				55					60				
Cys	Leu	Phe	Leu	Ser	Arg	Thr	Phe	His	Glu	Glu	Glu	Gly	Ile	Asp	Glu
65					70					75				80	
Val	Ile	Val	Pro	Leu	Pro	Thr	Trp	Asn	Ala	Arg	Thr	Arg	Glu	Pro	Val
			85						90					95	
Thr	Asp	Asn	Val	Glu	Lys	Phe	Ala	Ile	Glu	Thr	Glu	Leu	Ile	Tyr	Lys
			100					105					110		
Tyr	Ser	Pro	Phe	Arg	Thr	Glu	Glu	Glu	Val	Met	Thr	Gln	Phe	Met	Lys
		115					120					125			
Ile	Pro	Gly	Asp	Ser	Gly	Thr	Leu	Val	Ile	Ile	Phe	Asn	Leu	Lys	Leu
		130				135					140				
Met	Asp	Asn	Gly	Glu	Pro	Glu	Leu	Asp	Ile	Ile	Ser	Asn	Pro	Arg	Asp
145				150					155					160	
Ile	Gln	Met	Ala	Glu	Thr	Ser	Pro	Glu	Gly	Thr	Lys	Pro	Glu	Arg	Arg

[illegible]

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Pro	Glu	Ala	Pro	Arg	Lys	Pro	Ala	Asn	Thr	Leu	Val	Lys	Thr	Ala	Ser
610						615				620					
Arg	Pro	Ala	Pro	Leu	Val	Gln	Gln	Leu	Ser	Pro	Ser	Leu	Leu	Pro	Asn
625					630					635					640
Ser	Lys	Ser	Pro	Arg	Glu	Val	Pro	Ser	Pro	Lys	Val	Ile	Lys	Thr	Pro
				645					650						655
Val	Val	Lys	Lys	Thr	Glu	Ser	Pro	Ile	Lys	Leu	Ser	Pro	Ala	Thr	Pro
				660					665						670
Ser	Arg	Lys	Arg	Ser	Val	Ala	Val	Ser	Asp	Glu	Glu	Glu	Val	Glu	Glu
				675					680						685
Glu	Ala	Glu	Arg	Arg	Lys	Glu	Arg	Cys	Lys	Arg	Gly	Arg	Phe	Val	Val
				690					695						
Lys	Glu	Glu	Lys	Lys	Asp	Ser	Asn	Glu	Leu	Ser	Asp	Ser	Ala	Gly	Gly
				705											720
Glu	Asp	Ser	Ala	Asp	Leu	Lys	Arg	Ala	Gln	Lys	Asp	Lys	Gly	Leu	His
				725					730						735
Val	Glu	Val	Arg	Val	Asn	Arg	Glu	Trp	Tyr	Thr	Gly	Arg	Val	Thr	Ala
				740					745						750
Val	Glu	Val	Gly	Lys	His	Val	Val	Arg	Trp	Lys	Val	Lys	Phe	Asp	Tyr
				755					760						
Val	Pro	Thr	Asp	Thr	Thr	Pro	Arg	Asp	Arg	Trp	Val	Glu	Lys	Gly	Ser
				770					775						
Glu	Asp	Val	Arg	Leu	Met	Lys	Pro	Pro	Ser	Pro	Glu	His	Gln	Ser	Leu
				785					790						800
Asp	Thr	Gln	Gln	Glu	Gly	Gly	Glu	Glu	Glu	Val	Gly	Pro	Val	Ala	Gln
				805					810						815
Gln	Ala	Ile	Ala	Val	Ala	Glu	Pro	Ser	Thr	Ser	Glu	Cys	Leu	Arg	Ile
				820					825						830
Glu	Pro	Asp	Thr	Thr	Ala	Leu	Ser	Thr	Asn	His	Glu	Thr	Ile	Asp	Leu
				835					840						
Leu	Val	Gln	Ile	Leu	Arg	Asn	Cys	Leu	Arg	Tyr	Phe	Leu	Pro	Pro	Ser
				850					855						
Phe	Pro	Ile	Ser	Lys	Lys	Gln	Leu	Ser	Ala	Met	Asn	Ser	Asp	Glu	Leu
				865					870						880
Ile	Ser	Phe	Pro	Leu	Lys	Glu	Tyr	Phe	Lys	Gln	Tyr	Glu	Val	Gly	Leu
				885					890						895
Gln	Asn	Leu	Cys	Asn	Ser	Tyr	Gln	Ser	Arg	Ala	Asp	Ser	Arg	Ala	Lys
				900					905						910
Ala	Ser	Glu	Glu	Ser	Leu	Arg	Thr	Ser	Glu	Arg	Lys	Leu	Arg	Glu	Thr
				915					920						925
Glu	Glu	Lys	Leu	Gln	Lys	Leu	Arg	Thr	Asn	Ile	Val	Ala	Leu	Leu	Gln
				930					935						940
Lys	Val	Gln	Glu	Asp	Ile	Asp	Ile	Asn	Thr	Asp	Asp	Glu	Leu	Asp	Ala
				945					950						955
Tyr	Ile	Glu	Asp	Leu	Ile	Thr	Lys	Gly	Asp						960
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<210> 3379

<211> 898

<212> DNA

<213> Homo sapiens

<400> 3379

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 ccccaacctt gggagctcag agtgtcagaa gatgcgttat tgggctcaga gattgcacag
 180
 gtaacagggg atgatgtgga ctacaggacc gtgctgtggt atgtgctaag cccatctggg
 240
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 300
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 cagagcctct accaggtaat gctgcttgag cacacacccc caggcagtg c attctctcc
 480
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 720
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 780
 ggctccactc tgctaacctt ggaggtaca gatgctgatg gaagcccgag ccatgccgct
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 898

<210> 3380

<211> 299

<212> PRT

<213> Homo sapiens

<400> 3380

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		20						25					30		
Thr	Asn	Gly	Asn	Arg	Pro	Thr	Ile	Pro	Gln	Pro	Trp	Glu	Leu	Arg	Val
		35					40					45			
Ser	Glu	Asp	Ala	Leu	Leu	Gly	Ser	Glu	Ile	Ala	Gln	Val	Thr	Gly	Asn
	50					55				60					
Asp	Val	Asp	Ser	Gly	Pro	Val	Leu	Trp	Tyr	Val	Leu	Ser	Pro	Ser	Gly
65				70				75						80	
Pro	Gln	Asp	Pro	Phe	Ser	Val	Gly	Arg	Tyr	Gly	Gly	Arg	Val	Ser	Leu
			85					90						95	
Thr	Gly	Pro	Leu	Asp	Phe	Glu	Gln	Cys	Asp	Arg	Tyr	Gln	Leu	Gln	Leu
		100					105						110		
Leu	Ala	His	Asp	Gly	Pro	His	Glu	Gly	Arg	Ala	Xaa	Leu	Thr	Val	Leu
	115						120					125			
Val	Glu	Asp	Val	Asn	Asp	Asn	Ala	Pro	Ala	Phe	Ser	Gln	Ser	Leu	Tyr

130		135		140
Gln Val Met Leu Leu Glu His Thr Pro Pro Gly Ser Ala Ile Leu Ser				
145		150		155
Val Ser Ala Thr Asp Arg Asp Ser Gly Ala Asn Gly His Ile Ser Tyr				160
	165		170	
His Leu Ala Ser Pro Ala Asp Gly Phe Ser Val Asp Pro Asn Asn Gly				175
	180		185	190
Thr Leu Phe Thr Ile Val Gly Thr Leu Ala Leu Gly His Asp Gly Ser				
	195	200		205
Gly Ala Val Asp Val Val Leu Glu Ala Arg Asp His Gly Ala Pro Val				
	210	215	220	
Arg Ala Ala Arg Ala Thr Val Asn Val Gln Leu Arg Asp Gln Asn Asp				240
225		230	235	
His Ala Pro Ser Phe Thr Leu Phe His Tyr Arg Val Ala Val Thr Glu				255
	245		250	
Asp Leu Pro Pro Gly Ser Thr Leu Leu Thr Leu Glu Ala Thr Asp Ala				
	260	265		270
Asp Gly Ser Arg Ser His Ala Ala Val Asp Tyr Ser Ile Ile Ser Gly				
	275	280		285
Asn Trp Gly Arg Val Phe Gln Leu Glu Pro Arg				
290		295		

<210> 3381

<211> 1379

<212> DNA

<213> Homo sapiens

<400> 3381

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 120
 gaagcggcct gtggcagcaa gaaacgggta gtgccaggta ttgtgtacct gggccataac
 180
 ccgcccgcgt tccggcccct gcacgtccgc aaccttctca ggcctatagg cgaggctcga
 240
 cgcgtcttct ttcaggctga ggaccgggtc gtgagacgca agaagaaggc agcagcagct
 300
 gccggaggga aaaagcgggc ctacaccaag gactacaccg agggatgggt ggagtccgt
 360
 gacaagcgca tagccaagcg cgtggcgccc agtctacaca acacgcctat ggggtcccgc
 420
 aggcgcagcc ccttcctgta tgatctttgg aacctcaagt acttgacagg ttccacctgg
 480
 tcccacctca gcgagcacct cgcctttgag cgccagggtc gcaggcagcg cttgagagcg
 540
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 720
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 780

ttgagagccc cgccaccctc agagagcatg gagggacctt ccttggtcag ggactcctga
 840
 gggcctgggt gggcccttcc atttctgtgc cctgctctgc tctctgtcta cctcatacta
 900
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 960
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 1020
 cctggctgag tcacctaatt catactgtca tactagcata attatgacta ttgcatatgc
 1080
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 1200
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 1260
 agttaatggg gtggactggg ttgggaagaa atacatttcc taatgtattt atagaaaaata
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 1379

<210> 3382

<211> 279

<212> PRT

<213> Homo sapiens

<400> 3382

Xaa Pro Leu Val Ser Val Asn Met Glu Ala Glu Glu Ser Glu Lys Ala
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 20 25 30
 Glu Glu Glu Gln Glu Glu Ser Glu Glu Ala Ala Cys Gly Ser Lys Lys
 35 40 45
 Arg Val Val Pro Gly Ile Val Tyr Leu Gly His Ile Pro Pro Arg Phe
 50 55 60
 Arg Pro Leu His Val Arg Asn Leu Leu Ser Ala Tyr Gly Glu Val Gly
 65 70 75 80
 Arg Val Phe Phe Gln Ala Glu Asp Arg Phe Val Arg Arg Lys Lys Lys
 85 90 95
 Ala Ala Ala Ala Ala Gly Gly Lys Lys Arg Ser Tyr Thr Lys Asp Tyr
 100 105 110
 Thr Glu Gly Trp Val Glu Phe Arg Asp Lys Arg Ile Ala Lys Arg Val
 115 120 125
 Ala Ala Ser Leu His Asn Thr Pro Met Gly Ala Arg Arg Arg Ser Pro
 130 135 140
 Phe Arg Tyr Asp Leu Trp Asn Leu Lys Tyr Leu His Arg Phe Thr Trp
 145 150 155 160
 Ser His Leu Ser Glu His Leu Ala Phe Glu Arg Gln Val Arg Arg Gln
 165 170 175
 Arg Leu Arg Ala Glu Val Ala Gln Ala Lys Arg Glu Thr Asp Phe Tyr
 180 185 190
 Leu Gln Ser Val Glu Arg Gly Gln Arg Phe Leu Ala Ala Asp Gly Asp
 195 200 205
 Pro Ala Arg Pro Asp Gly Ser Trp Thr Phe Ala Gln Arg Pro Thr Glu

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      210              215              220
Gln Glu Leu Arg Ala Arg Lys Ala Ala Arg Pro Gly Gly Arg Glu Arg
225              230              235              240
Ala Arg Leu Ala Thr Ala Gln Asp Lys Ala Arg Ser Asn Lys Gly Leu
      245              250              255
Leu Ala Arg Ile Phe Gly Ala Pro Pro Pro Ser Glu Ser Met Glu Gly
      260              265              270
Pro Ser Leu Val Arg Asp Ser
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<210> 3383
<211> 309
<212> DNA
<213> Homo sapiens

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<400> 3383
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120
aaatgctcac ttcttaacct cttttgtcct ggagcataga attactgcaa atgctcaccc
180
ctggggagctg tcctgcccc gatctccac acaaacactc cagcatgaaa gagcgagact
240
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300
agaaagccc
309

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<210> 3384
<211> 94
<212> PRT
<213> Homo sapiens

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<400> 3384
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Thr Asn Phe Val Ala Gly Val Ser Ile Val Val Ile Cys Val Ile Gly
      20      25      30
Asn Ala His Phe Leu Thr Ser Phe Val Leu Glu His Arg Ile Thr Ala
      35      40      45
Asn Ala His Pro Trp Glu Leu Ser Cys Pro Arg Ser Pro Thr Gln Thr
      50      55      60
Leu Gln His Glu Arg Ala Arg Leu Asn Leu Lys Lys Lys Phe Arg
65      70      75      80
Ala Pro Glu Gln Glu Leu Val Ser Ile Ile Asn Ser Glu Ser
      85      90

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<210> 3385
<211> 720
<212> DNA
<213> Homo sapiens

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<400> 3385

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 120
 gtgaaaacag tgacgggtgcg ggggtgggga gcaactgcgtt ccactttctt agccccccac
 180
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 240
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 300
 cacatggagg atccccgga gatggagcgg agccccagc tgcggaagca cgcctgccga
 360
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 420
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 480
 aagatcctct ctggggctcat tctggaggtg gtcgccgagg aatttgcag tgacttccca
 540
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<210> 3386

<211> 188

<212> PRT

<213> Homo sapiens

<400> 3386

Met Val Val Lys Thr Val Thr Val Arg Gly Trp Gly Ala Leu Arg Ser
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 20 25 30
 Gln Pro Pro Ala Ser Ala Thr Thr Pro Val Pro Leu Ala Arg Phe Phe
 35 40 45
 Val Asn Phe Pro Ser Ala Lys Gln Tyr Phe Ser Gln Phe Lys His Met
 50 55 60
 Glu Asp Pro Leu Glu Met Glu Arg Ser Pro Gln Leu Arg Lys His Ala
 65 70 75 80
 Cys Arg Val Met Gly Ala Leu Asn Thr Val Val Glu Asn Leu His Asp
 85 90 95
 Pro Asp Lys Val Ser Ser Val Leu Ala Leu Val Gly Lys Ala His Ala
 100 105 110
 Leu Lys His Lys Val Glu Pro Val Tyr Phe Lys Ile Leu Ser Gly Val
 115 120 125
 Ile Leu Glu Val Val Ala Glu Glu Phe Ala Ser Asp Phe Pro Pro Glu
 130 135 140
 Thr Gln Arg Ala Trp Ala Lys Leu Arg Gly Leu Ile Tyr Ser His Val
 145 150 155 160
 Thr Ala Ala Tyr Lys Glu Val Gly Trp Val Gln Gln Val Pro Asn Ala
 165 170 175
 Thr Thr Pro Pro Ala Thr Leu Pro Ser Ser Gly Pro

180

185

<210> 3387
<211> 3299
<212> DNA
<213> Homo sapiens

<400> 3387
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ggaagaggcc tcttattagg gctctggtgg cggcggcgcc ggacccttgg ggtctggacg
180
caacggcgcc gggagcatga acgccccctc agccttcgag tcgttcttgc tcttcgaggg
240
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300
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360
attaaatcac aactcctaaa agaccgcgaa gtgctatttg ctggctacaa agtccccac
420
cccttggagc acaagatcat catccgagtg cagaccacgc cggactacag cccccaggaa
480
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540
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660
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720
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780
aataaagtat agcgaagag acctggatgt ggacttgagc agcggtgact tcgcaagcaa
840
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900
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960
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1560
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 3180
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<210> 3388

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3388

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Leu	Gly	Val	Trp	Thr	Gln	Arg	Arg	Arg	Glu	His	Glu	Arg	Pro	Ser
			20					25					30	
Leu	Arg	Val	Val	Leu	Ala	Leu	Arg	Gly	Arg	Glu	Glu	Val	Ser	Asp
		35				40						45		Ala
Gly	Cys	Gly	Gly	Pro	Arg	Ile	Thr	Ile	Asn	Lys	Asp	Thr	Lys	Val
	50				55				60					Pro
Asn	Ala	Cys	Leu	Phe	Thr	Ile	Asn	Lys	Glu	Asp	His	Thr	Leu	Gly
65				70					75					80
Ile	Ile	Lys	Ser	Gln	Leu	Leu	Lys	Asp	Pro	Gln	Val	Leu	Phe	Ala
				85				90					95	Gly
Tyr	Lys	Val	Pro	His	Pro	Leu	Glu	His	Lys	Ile	Ile	Ile	Arg	Val
			100					105					110	Gln
Thr	Thr	Pro	Asp	Tyr	Ser	Pro	Gln	Glu	Ala	Phe	Thr	Asn	Ala	Ile
			115				120					125		Thr
Asp	Leu	Ile	Ser	Glu	Leu	Ser	Leu	Leu	Glu	Glu	Arg	Phe	Arg	Val
	130				135						140			Ala
Ile	Lys	Asp	Lys	Gln	Glu	Gly	Ile	Glu						
145					150									

<210> 3389

<211> 308

<212> DNA

<213> Homo sapiens

<400> 3389

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 gacggggcctc cgtttctgga gccgctgctt aacttcatct gtttctctgct gctggctgtg
 180
 gacgggggaac ctcttgacca gcctcatggg ctctctcagag caggaggatg gggaggagag
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 300

cggtcgac
308

<210> 3390
<211> 102
<212> PRT
<213> Homo sapiens

<400> 3390
Xaa Val Ser Lys Pro Phe His His Gln His Val Leu Ile Ser Arg Phe
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Leu Cys Leu Lys Asn Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr
20 25 30
Thr Gln Lys His Pro Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro
35 40 45
Leu Leu Asn Phe Ile Trp Phe Leu Leu Leu Ala Val Asp Gly Glu Pro
50 55 60
Ser Asp Gln Pro His Gly Leu Leu Arg Ala Gly Gly Trp Gly Gly Glu
65 70 75 80
Pro Gln Arg Arg Gln Pro His Arg Ala Gly Leu Asn Trp Pro Gly His
85 90 95
Val Glu Thr Pro Arg Ser
100

<210> 3391
<211> 1295
<212> DNA
<213> Homo sapiens

<400> 3391
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gaagccctaa gtgacagttc agagcgctctt ttctcctttg gcgtcatcgc agatgttcaa
120
tttgcagact tagaagatgg cttaatttc caaggaacca ggcggcgata ctacagacat
180
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240
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300
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<212> PRT

<213> Homo sapiens

<400> 3392

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 Glu Asp Gln Ile Val His His Pro Glu Thr Met Pro Ser Glu Asp Tyr
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 Asp Ala Tyr Asp Leu Ser Val Leu Gly Val Asp Gln Ser Ser Pro Lys
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 Tyr Glu Gln Cys Met Lys Ile Leu Arg Glu His Asn Pro Asn Thr Glu
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Phe Ser Asp Thr Asn Gln Glu Lys Val Val Ile Val Ser His Leu Pro
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Ile Tyr Pro Asp Ala Ser Asp Asn Val Cys Leu Ala Trp Asn Tyr Arg
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Asp Ala Leu Ala Val Ile Trp Ser His Glu Cys Val Val Cys Phe Phe
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Ala Gly His Thr His Asp Gly Gly Tyr Ser Glu Asp Pro Phe Gly Val
      290              295              300
Tyr His Val Asn Leu Glu Gly Val Ile Glu Thr Ala Pro Asp Ser Gln
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Ala Phe Gly Thr Val His Val Tyr Pro Asp Lys Met Met Leu Lys Gly
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 <212> DNA
 <213> Homo sapiens

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 <213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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 Ala Trp Tyr Ser Glu Ser Glu Ile Thr Gln Gly Ala Arg Ser Arg Ser
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 Ser Met Val Leu Gly Ser Phe Gly Thr Asp Leu Met Arg Glu Arg Arg
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 Asp Leu Glu Arg Arg Thr Asp Ser Ser Ile Ser Asn Leu Met Asp Tyr
 145 150 155 160
 Ser His Arg Ser Gly Asp Phe Thr Thr Ser Ser Tyr Val Gln Asp Arg
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 <211> 492
 <212> DNA
 <213> Homo sapiens

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 <211> 163
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 Glu Val Met Gly Asp Ala Val Leu Glu Ala Ser His Asn Val Gln Gly
 65 70 75 80
 Cys Gly Cys Ser Trp Val Ser His Ser Gly Arg Gly Val Gly Pro Glu
 85 90 95
 Ala Glu Gly Ala Gly Ser Pro Gln Ser Leu Gly His Gly Ser Gly Gly
 100 105 110
 Trp Ala Ala Arg Arg Cys His Cys Leu Ser Val Ala Gly Val Ala Ala
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<210> 3399
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 <212> DNA
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<211> 1069

<212> PRT

<213> Homo sapiens

<400> 3400

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Lys	Ser	Trp	Pro	Lys	Asp	Ser	Val	Val	Tyr	Ala	Lys	Ser	Leu	Glu	
		210				215				220					
His	Ser	Gly	Ser	Leu	Asp	Asp	Pro	Asn	Arg	Ile	Ser	Leu	Val	Lys	Arg

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225                230                235                240
Asn Ala Val Leu Pro Ser Lys Pro Leu Gln Asp Arg Glu Ala Met Asp
245                250                255
Asp Lys Pro Gly Val Ser Gly Gln Leu Pro Lys Gly Lys Ala Leu Glu
260                265                270
Leu Ala Leu Lys Arg Pro Arg Pro Pro Val Leu Ser Val Cys Ser Ser
275                280                285
Ser Glu Thr Pro Tyr Leu Leu Lys Glu Thr Asn Lys Gly Asn Gly Gln
290                295                300
Gly Glu Asp Arg Asn Leu Leu Tyr Tyr Ser Lys Leu Gly Leu Val Ile
305                310                315
Pro Ser Ser Gly Ser Gly Ser Gly Asn Gln Ser Ile Asp Arg Ser Gly
325                330                335
Pro Leu Val Lys Ser Leu Leu Arg Arg Ser Leu Ser Met Asp Ser Gln
340                345                350
Val Pro Val Tyr Ser Pro Ser Ile Asp Leu Lys Ser Ser Gln Gly Ser
355                360                365
Ser Ser Val Ser Ser Asp Ala Pro Gly Asn Val Leu Cys Ala Leu Ser
370                375                380
Gln Lys Ser Ser Leu Lys Asp Cys Ser Glu Lys Thr Ala Leu Asp Asp
385                390                395
Arg Pro Gln Val Leu Gln Pro His Arg Leu Arg Ser Phe Ser Ala Ser
405                410                415
Gln Ser Thr Asp Arg Glu Gly Ala Ser Pro Val Thr Glu Val Arg Ile
420                425                430
Lys Thr Glu Pro Ser Ser Pro Leu Ser Asp Pro Ser Asp Ile Ile Arg
435                440                445
Val Thr Val Gly Asp Ala Ala Thr Thr Ala Ala Ser Ser Ser Ser
450                455                460
Val Thr Arg Asp Leu Ser Leu Lys Thr Glu Asp Asp Gln Lys Asp Met
465                470                475
Ser Arg Leu Pro Ala Lys Arg Arg Phe Gln Ala Asp Arg Arg Leu Pro
485                490                495
Phe Lys Lys Leu Lys Val Asn Glu His Gly Ser Pro Val Ser Glu Asp
500                505                510
Asn Phe Glu Glu Gly Ser Ser Thr Leu Leu Asp Ala Asp Phe Pro
515                520                525
Asp Ser Asp Leu Asn Lys Asp Glu Phe Gly Glu Leu Glu Gly Thr Arg
530                535                540
Pro Asn Lys Lys Phe Lys Cys Lys His Cys Leu Lys Ile Phe Arg Ser
545                550                555
Thr Ala Gly Leu His Arg His Val Asn Met Tyr His Asn Pro Glu Lys
565                570                575
Pro Tyr Ala Cys Asp Ile Cys His Lys Arg Phe His Thr Asn Phe Lys
580                585                590
Val Trp Thr His Cys Gln Thr Gln His Gly Ile Val Lys Asn Pro Ser
595                600                605
Pro Ala Ser Ser Ser His Ala Val Leu Asp Glu Lys Phe Gln Arg Lys
610                615                620
Leu Ile Asp Ile Val Arg Glu Arg Glu Ile Lys Lys Ala Leu Ile Ile
625                630                635
Lys Leu Arg Arg Gly Lys Pro Gly Phe Gln Gly Gln Ser Ser Ser Gln
645                650                655
Ala Gln Gln Val Ile Lys Arg Asn Leu Arg Ser Arg Ala Lys Gly Ala

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        660                665                670
Tyr Ile Cys Thr Tyr Cys Gly Lys Ala Tyr Arg Phe Leu Ser Gln Phe
      675                680                685
Lys Gln His Ile Lys Met His Pro Gly Glu Lys Pro Leu Gly Val Asn
      690                695                700
Lys Val Ala Lys Pro Lys Glu His Ala Pro Leu Ala Ser Pro Val Glu
      705                710                715                720
Asn Lys Glu Val Tyr Gln Cys Arg Leu Cys Asn Ala Lys Leu Ser Ser
      725                730                735
Leu Leu Glu Gln Gly Ser His Glu Arg Leu-Cys Arg Asn Ala Ala Val
      740                745                750
Cys Pro Tyr Cys Ser Leu Arg Phe Phe Ser Pro Glu Leu Lys Gln Glu
      755                760                765
His Glu Ser Lys Cys Glu Tyr Lys Lys Leu Thr Cys Leu Glu Cys Met
      770                775                780
Arg Thr Phe Lys Ser Ser Phe Ser Ile Trp Arg His Gln Val Glu Val
      785                790                795                800
His Asn Gln Asn Asn Met Ala Pro Thr Glu Asn Phe Ser Leu Pro Val
      805                810                815
Leu Asp His Asn Gly Asp Val Thr Gly Ser Ser Arg Pro Gln Ser Gln
      820                825                830
Pro Glu Pro Asn Lys Val Asn His Ile Val Thr Thr Lys Asp Asp Asn
      835                840                845
Val Phe Ser Ser Asp Ser Ser Glu Gln Val Asn Phe Asp Ser Glu Asp Ser
      850                855                860
Ser Cys Leu Pro Glu Asp Leu Ser Leu Ser Lys Gln Leu Lys Ile Gln
      865                870                875                880
Val Lys Glu Glu Pro Val Glu Glu Ala Glu Glu Ala Pro Glu Ala
      885                890                895
Ser Thr Ala Pro Lys Glu Ala Gly Pro Ser Lys Glu Ala Ser Leu Trp
      900                905                910
Pro Cys Glu Lys Cys Gly Lys Met Phe Thr Val His Lys Gln Leu Glu
      915                920                925
Arg His Gln Glu Leu Leu Cys Ser Val Lys Pro Phe Ile Cys His Val
      930                935                940
Cys Asn Lys Ala Phe Arg Thr Asn Phe Arg Leu Trp Ser His Phe Gln
      945                950                955                960
Ser His Met Ser Gln Ala Ser Glu Glu Ser Ala His Lys Glu Ser Glu
      965                970                975
Val Cys Pro Val Pro Thr Asn Ser Pro Ser Pro Pro Pro Leu Pro Pro
      980                985                990
Pro Pro Pro Leu Pro Lys Ile Gln Pro Leu Glu Pro Asp Ser Pro Thr
      995                1000                1005
Gly Leu Ser Glu Asn Pro Thr Pro Ala Thr Glu Lys Leu Phe Val Pro
      1010                1015                1020
Gln Glu Ser Asp Thr Leu Phe Tyr His Ala Pro Pro Leu Ser Ala Ile
      1025                1030                1035                1040
Thr Phe Lys Arg Gln Phe Met Cys Lys Leu Cys His Arg Thr Phe Lys
      1045                1050                1055
Thr Ala Phe Ser Leu Trp Ser His Glu Gln Thr His Asn
      1060                1065

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<210> 3401

<211> 579

<212> DNA

<213> Homo sapiens

<400> 3401

gttgaaaata aggaaaagga cagcaatatg ccacactttc aaactttgca agctattgtt
 60
 tctcacttcc aaaagttatt tgatgtgcct tctttaaatg gagtctatcc ccgaatgaat
 120
 gaagtttata ctaggcttgg agaaatgaac aatgctgtga gaaacctcca agaactctta
 180
 gaattagata gttcatcctc attgtgtgtg ctagtaagca ctgttggaat actctgtagg
 240
 ctgattaatg aagatgtgaa tgagcaggtt atgcaggtat taggacctga agacctccag
 300
 agcattatct acaaattgga agaacacgag gaatttttcc cagcatttca ggcatttact
 360
 aatgatctac ttgaaatctt agaaattgat gactctggat gccattgtac ctgcagtaaa
 420
 gaaattaaaa gtactttcat actgaaaaca aatcaaatca tttttactgt gtaaatgtga
 480
 ttcttaacat tttgtatttt gtaggattga tcttattttg agacaagggt tgtaaaatgt
 540
 atttgccttc agaattcatc ccttcttag tattaggtc
 579

<210> 3402

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3402

Met	Pro	His	Phe	Gln	Thr	Leu	Gln	Ala	Ile	Val	Ser	His	Phe	Gln	Lys
1				5					10					15	
Leu	Phe	Asp	Val	Pro	Ser	Leu	Asn	Gly	Val	Tyr	Pro	Arg	Met	Asn	Glu
			20					25					30		
Val	Tyr	Thr	Arg	Leu	Gly	Glu	Met	Asn	Asn	Ala	Val	Arg	Asn	Leu	Gln
			35				40					45			
Glu	Leu	Leu	Glu	Leu	Asp	Ser	Ser	Ser	Ser	Leu	Cys	Val	Leu	Val	Ser
	50				55					60					
Thr	Val	Gly	Lys	Leu	Cys	Arg	Leu	Ile	Asn	Glu	Asp	Val	Asn	Glu	Gln
	65				70				75				80		
Val	Met	Gln	Val	Leu	Gly	Pro	Glu	Asp	Leu	Gln	Ser	Ile	Ile	Tyr	Lys
			85					90					95		
Leu	Glu	Glu	His	Glu	Glu	Phe	Phe	Pro	Ala	Phe	Gln	Ala	Phe	Thr	Asn
			100					105					110		
Asp	Leu	Leu	Glu	Ile	Leu	Glu	Ile	Asp	Asp	Ser	Gly	Cys	His	Cys	Thr
			115				120					125			
Cys	Ser	Lys	Glu	Ile	Lys	Ser	Thr	Phe	Ile	Leu	Lys	Thr	Asn	Gln	Ile
			130				135					140			
Ile	Phe	Thr	Val												
145															

<210> 3403

<211> 1696

<212> DNA

<213> Homo sapiens

<400> 3403

aaaaacatca gtgtctgtgg gtagttagaa tcttcagttc ctgtgagcgt cggcgctcttc
60
tggggcctgtg gagtttcttg gacagggggc gcggggctcc aggacggcgc ccttagcgac
120
accatggccc gaaatgcaga aaaggccatg acggccttag caagattctg ccaggctcag
180
ctggaagagg gaaaagtga ggaacgaaga ccctttctgg cctcagaatg tactgaactg
240
cctaaagctg agaagtggag acgacagatc attggagaga tctctaaaaa agtggctcag
300
attcagaatg ctggttttag tgaatttcga attcgtgacc tgaatgatga aattaacaag
360
ctgctaaggg agaaaggaca ctgggaggtc cgataaaagg agctgggagg tctgtattat
420
ggaaaagtgt gccctaaaaat gctggatcat gaaggaaaag aagtcaccag aaaccgaggt
480
tacaagtact ttggagcagc aaaagatttg cctgggtgta gagagctgtt tgaaaaanga
540
acctcttctc cctcccagnn aaagacaagt gctgagctca tgaaggcaat cgatttttag
600
tactatgggt acctagatga agatgatggt gtattgtgac ctttggaaca ggaatatgaa
660
aagaaactca gagccgagtt agtggaagg tggaagcag agagagaggc tcggctggca
720
agaggagaaa aggaagagga ggaggaagag gaggaagaga tcaacatcta tcagtcacc
780
gaggaggagt cggacagagga aggcagccag gagaaaggag gggacgacag ccagcagaag
840
ttcattgtct acgtccctgt tcctctcgca caagagattg aggaggcact ggtgcgaagg
900
aagaaaatgg aactcctcca gaagtatgca agcgagagcc tgcaggccca aagtgaagaa
960
gccagaaggc tcctggggta ttaggaccca gctggggctc tccttgaggt tcttccatcc
1020
cccagtggtg cctcaggacc cagggctgca gacacaggct ggtgctgcaa gggctcctgc
1080
cccattctca gccttctctc cctctccttg tctcatgttg accggagggg aggggtctgt
1140
ccctggtctt cctggtaggt tttgtacaca tattttgcta ctgtgtggat ccattttatt
1200
ttattgtgga gtgtatacaa cagggttgca actggctgcc tgtgtcttat ttgactgtgc
1260
actgccattt tgaggggaga agaatcaatt agtggcaaac atttaaaaaa gcaatttttt
1320
gcagaccaaa gtataatttt aaaaaatgca aattttctaa aagacacatc tcttgaaaaa
1380
tgagatgatg tggccaggcg cagtggctca cgctgtaac ccagcactt tgggaggccg
1440
aggcgggagg gtcacgaggt caagagatgg agaccatcct ggccaacatg gtgaaacccc
1500

atgtctacta aaaatacaaa aaaattagct gggcgtagct gcatgcacct gtagtcccag
 1560
 ctgctttggg aggctgaggc aggagaatca cttgaacccc cggagggtgga gggtttgagt
 1620
 agccagatc gtggccattg actccaagcc ttggggacaag tgggaacctc ttccccccaa
 1680
 aaaaaaaaaa aagttt
 1696

<210> 3404

<211> 286

<212> PRT

<213> Homo sapiens

<400> 3404

Met	Ala	Arg	Asn	Ala	Glu	Lys	Ala	Met	Thr	Ala	Leu	Ala	Arg	Phe	Arg
1			5					10						15	
Gln	Ala	Gln	Leu	Glu	Glu	Gly	Lys	Val	Lys	Glu	Arg	Arg	Pro	Phe	Leu
			20					25					30		
Ala	Ser	Glu	Cys	Thr	Glu	Leu	Pro	Lys	Ala	Glu	Lys	Trp	Arg	Arg	Gln
		35					40					45			
Ile	Ile	Gly	Glu	Ile	Ser	Lys	Lys	Val	Ala	Gln	Ile	Gln	Asn	Ala	Gly
		50				55					60				
Leu	Gly	Glu	Phe	Arg	Ile	Arg	Asp	Leu	Asn	Asp	Glu	Ile	Asn	Lys	Leu
65				70						75				80	
Leu	Arg	Glu	Lys	Gly	His	Trp	Glu	Val	Arg	Ile	Lys	Glu	Leu	Gly	Gly
			85					90						95	
Pro	Asp	Tyr	Gly	Lys	Val	Gly	Pro	Lys	Met	Leu	Asp	His	Glu	Gly	Lys
			100					105					110		
Glu	Val	Pro	Gly	Asn	Arg	Gly	Tyr	Lys	Tyr	Phe	Gly	Ala	Ala	Lys	Asp
		115				120						125			
Leu	Pro	Gly	Val	Arg	Glu	Leu	Phe	Glu	Lys	Xaa	Thr	Ser	Ser	Ser	Ser
		130				135					140				
Gln	Xaa	Lys	Thr	Arg	Ala	Glu	Leu	Met	Lys	Ala	Ile	Asp	Phe	Glu	Tyr
145				150						155				160	
Tyr	Gly	Tyr	Leu	Asp	Glu	Asp	Asp	Gly	Val	Ile	Val	Pro	Leu	Glu	Gln
			165					170						175	
Glu	Tyr	Glu	Lys	Lys	Leu	Arg	Ala	Glu	Leu	Val	Glu	Lys	Trp	Lys	Ala
		180						185					190		
Glu	Arg	Glu	Ala	Arg	Leu	Ala	Arg	Gly	Glu	Lys	Glu	Glu	Glu	Glu	Glu
		195					200				205				
Glu	Glu	Glu	Glu	Ile	Asn	Ile	Tyr	Ala	Val	Thr	Glu	Glu	Glu	Ser	Asp
		210				215					220				
Glu	Glu	Gly	Ser	Gln	Glu	Lys	Gly	Gly	Asp	Asp	Ser	Gln	Gln	Lys	Phe
225				230						235				240	
Ile	Ala	His	Val	Pro	Val	Pro	Ser	Gln	Gln	Glu	Ile	Glu	Glu	Ala	Leu
			245					250						255	
Val	Arg	Arg	Lys	Lys	Met	Glu	Leu	Leu	Gln	Lys	Tyr	Ala	Ser	Glu	Thr
			260				265						270		
Leu	Gln	Ala	Gln	Ser	Glu	Glu	Ala	Arg	Arg	Leu	Leu	Gly	Tyr		
		275					280					285			

<210> 3405

<211> 402

<212> DNA

<213> Homo sapiens

<400> 3405

gggtgggagg ccccttgca ggagaggctg gcgttctatc agacagcaat tgaaagcgcc
 60
 agacaagctg gagacagcgc caagatgcgg cgctacgacg gggggcttaa aacctggaa
 120
 aacctgctgc cctccatccg taagggaat gccattgacg aagcggacat cccgcccca
 180
 gtggcccatag gaaaaggccc ggcgtccacg cctacctaca gccctgcacc caccagccg
 240
 gccctagaa tcgctcagc cccagagccc agggtcaccc tggagggacc ttctgccacc
 300
 gccccagcct catctccagg cttggetaag cccagatgc cccagggtcc ctgcagccct
 360
 cctctctggcc cagttgcaga gccgccagcg cgactacaag ct
 402

<210> 3406

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3406

Gly	Trp	Glu	Ala	Pro	Leu	Gln	Glu	Arg	Leu	Ala	Phe	Tyr	Gln	Thr	Ala
1				5					10					15	
Ile	Glu	Ser	Ala	Arg	Gln	Ala	Gly	Asp	Ser	Ala	Lys	Met	Arg	Arg	Tyr
			20					25					30		
Asp	Arg	Gly	Leu	Lys	Thr	Leu	Glu	Asn	Leu	Leu	Ala	Ser	Ile	Arg	Lys
		35					40					45			
Gly	Asn	Ala	Ile	Asp	Glu	Ala	Asp	Ile	Pro	Pro	Pro	Val	Ala	Ile	Gly
	50				55				60						
Lys	Gly	Pro	Ala	Ser	Thr	Pro	Thr	Tyr	Ser	Pro	Ala	Pro	Thr	Gln	Pro
65					70				75					80	
Ala	Pro	Arg	Ile	Ala	Ser	Ala	Pro	Glu	Pro	Arg	Val	Thr	Leu	Glu	Gly
			85					90					95		
Pro	Ser	Ala	Thr	Ala	Pro	Ala	Ser	Ser	Pro	Gly	Leu	Ala	Lys	Pro	Gln
		100					105						110		
Met	Pro	Pro	Gly	Pro	Cys	Ser	Pro	Pro	Ser	Gly	Pro	Val	Ala	Glu	Pro
		115				120					125				
Pro	Ala	Arg	Leu	Gln	Ala										
		130													

<210> 3407

<211> 535

<212> DNA

<213> Homo sapiens

<400> 3407

ggaatgaggg gggatgggga agaaccccc aggacagcac caagcaggtc tgcgggggacc
 60
 ttctccggac accatgcctt ctccggcggtg aggcaggtgg cggcaccgac aggcccgggg
 120

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gggacctttc ccggacaccc aacctcctcg gtggcgagggc aggtggcggc accgacaggc
180
ccggcggggg cctttcccg ancacctggc ctcttggca agcagggtggc ggcaccaaca
240
ggccccgggg ggacctttcc cggacacctg gcctcctcgg cgaggcaggt ggcagaactg
300
gttccacgtc tgatcttcct tagacaaacc tgccttcaga ggaattgtg ttcaactgga
360
gaaactggaa aatgtactag atattggctg atatgaagga tatatgtttt aagtatgata
420
attcgatttt ggctctgtag ggaaggctc ttattttaaa aagatgtgca ctagagaaaa
480
aggaaacagc atgtagcaaa tacatccacg gatgtcctcc tggtttaaaa aaaaa
535

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<210> 3408

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3408

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Gly Met Arg Gly Asp Gly Glu Glu Pro Pro Arg Thr Ala Pro Ser Arg
1      5      10      15
Ser Ala Gly Thr Phe Pro Gly His His Ala Phe Ser Ala Val Arg Gln
20      25      30
Val Ala Ala Pro Thr Gly Pro Gly Thr Phe Pro Gly His Pro Thr
35      40      45
Ser Ser Val Ala Arg Gln Val Ala Ala Pro Thr Gly Pro Ala Gly Thr
50      55      60
Phe Pro Gly Xaa Pro Gly Leu Leu Gly Lys Gln Val Ala Ala Pro Thr
65      70      75      80
Gly Pro Gly Gly Thr Phe Pro Gly His Leu Ala Ser Ser Ala Arg Gln
85      90      95
Val Ala Glu Leu Val Pro Arg Leu Ile Phe Leu Arg Gln Thr Cys Leu
100      105      110
Gln Arg Lys Leu Cys Ser Thr Gly Glu Thr Gly Lys Cys Thr Arg Tyr
115      120      125
Trp Leu Ile
130

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<210> 3409

<211> 959

<212> DNA

<213> Homo sapiens

<400> 3409

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nagatctccg aggcacccgg acgggagcgc ttggccatcc tctctccggc agaggagcag
60
acgtttgtct tccaagtgca aaactacaga cgcgcgcgcg cacacacgca agcacacgcg
120
gagagagagg aaccttgccg gtccgaggca gctctgcgcg tccctcctcg cgcttagcat
180
ctcgggccca gcgcggcccg caccgccatg gaggtgctgg agagcgggga gcagggcgtg
240

```

ctgcagtggg accgcaagct gagcgagctg tcagagcccc gggacggcga ggcctcatg
 300
 taccacacgc attctctaga attctctgat gaggttttccc agaagctctt gggtcagctc
 360
 ctgaatgatc ctttctcttc agagaagagt gtgtcaatgg aggtggaacc ttccccgacg
 420
 tccccggcgc ctctcatcca ggctgagcac agctactccc tgtgcgagga gctctgggccc
 480
 cagtcgccct tcacccacat taccaccagt gacagcttca atgacgatga ggtggaaaagt
 540
 nngagaaaatg gtacctgtct acagacttcc cttcaacatc catcaagaca gagccagtta
 600
 cagacgaacc acccccagga ctctgtccgt ctgtcactct gaccatcaca gccatctcca
 660
 ccncgttgg aaaaggagga acctctctctg gaaatgaaca ctgggggtga ttcctctgtc
 720
 cagaccatta ttctctaaaat taagctggag cctcatgaag tggatcagtt tctaaacttc
 780
 tctctctaaag aaggtctgtc tngcctctcc tgtgtccctt tgggttatgg atatgtctc
 840
 tgggtctaca gagaggggaat atggcgagag agctgggatg agtttgtacc acagatgttg
 900
 tagcttgctt tatgaaatag ctctgttctt aaaaaataaa aattttgctt ccaataaa
 959

<210> 3410

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3410

Met	Glu	Val	Leu	Glu	Ser	Gly	Glu	Gln	Gly	Val	Leu	Gln	Trp	Asp	Arg
1				5					10					15	
Lys	Leu	Ser	Glu	Leu	Ser	Glu	Pro	Gly	Asp	Gly	Glu	Ala	Leu	Met	Tyr
			20					25					30		
His	Thr	His	Phe	Ser	Glu	Leu	Leu	Asp	Glu	Phe	Ser	Gln	Asn	Val	Leu
			35				40					45			
Gly	Gln	Leu	Leu	Asn	Asp	Pro	Phe	Leu	Ser	Glu	Lys	Ser	Val	Ser	Met
			50			55					60				
Glu	Val	Glu	Pro	Ser	Pro	Thr	Ser	Pro	Ala	Pro	Leu	Ile	Gln	Ala	Glu
			65			70				75				80	
His	Ser	Tyr	Ser	Leu	Cys	Glu	Glu	Pro	Arg	Ala	Gln	Ser	Pro	Phe	Thr
				85					90					95	
His	Ile	Thr	Thr	Ser	Asp	Ser	Phe	Asn	Asp	Asp	Glu	Val	Glu	Ser	Xaa
			100					105					110		
Arg	Asn	Gly	Thr	Cys	Leu	Gln	Thr	Ser	Leu	Gln	His	Pro	Ser	Arg	Gln
			115				120					125			
Ser	Gln	Leu	Gln	Thr	Asn	His	Pro	Gln	Asp	Ser	Phe	Arg	Leu	Ser	Leu
			130				135					140			

<210> 3411

<211> 958

<212> DNA

<213> Homo sapiens

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<400> 3411
nngcgcgcgcg gttttgttgt tattgcgagg gggtcgcggt ggggcggggc agtgaccccg
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ggcgcggccgt tgtgccctca tccctccac ccttcctteg tatagcttc tttctctca
120
cgacggccctc cacagtccgg agcccgcgagg agcccgacc tggcggggag agctgcctcc
180
acggccgggc acccagaccc caccgtcgca gtcgccacca ctcagtcca tccttggtac
240
cggaatggg cttcgatatcc tccagtgcac ttgtaactga cttggacacg gaataactaag
300
aactcacttc tgtctcctc ccagtcgcgc cggcggtgac catctcggt cttttgggct
360
taactgccgc tcctctggac tctgtctgac tttgggggca ccatggacca aagtgggatg
420
gagattcctg tgacctcat cattaagca cgaatcaga aatacagta ccagactatt
480
agctgctctt tgaactggag cgtggggaaa ctataacacg atctatctaa cgtttaccct
540
agcaaacatc tgacgaagga tcagagattg gtgtattcgg gcagactgct tcccgatcat
600
ctgcagctga aagacattct cagaaaaaa gatgagatc atattggtca tctagtatgt
660
acttctcgga ctctccag ttctccaaa tccagacca atagagaaa tcataagga
720
ttggcatcca gcagaattc tagttcagat cattcaggat caacaactcc atcatctggt
780
caagaaacct tgtctttagc tgtgggttct tcctcagaag gattgaggca gcgtaccctt
840
ccacaagcac aaactgacca agcacagagt caccagtttc catatgtaat gcaaggaaat
900
gtagacaacc aatttctcgg gcaagctgct ccacctggat tccagtgta tccgcggg
958

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<210> 3412

<211> 185

<212> PRT

<213> Homo sapiens

<400> 3412

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Met Asp Gln Ser Gly Met Glu Ile Pro Val Thr Leu Ile Ile Lys Ala
1          5          10          15
Pro Asn Gln Lys Tyr Ser Asp Gln Thr Ile Ser Cys Phe Leu Asn Trp
20          25          30
Thr Val Gly Lys Leu Lys Thr His Leu Ser Asn Val Tyr Pro Ser Lys
35          40          45
Pro Leu Thr Lys Asp Gln Arg Leu Val Tyr Ser Gly Arg Leu Leu Pro
50          55          60
Asp His Leu Gln Leu Lys Asp Ile Leu Arg Lys Gln Asp Glu Tyr His
65          70          75          80
Met Val His Leu Val Cys Thr Ser Arg Thr Pro Pro Ser Ser Pro Lys
85          90          95
Ser Ser Thr Asn Arg Glu Ser His Glu Ala Leu Ala Ser Ser Ser Asn

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ttttcaaaat ttcactctac aaacaacctc accacgaact gttgtgagaa ctgtgggagc
1140
tattgtcata gtactcttg tcttgcctaa tcccagaagg ttttttagtc aacaagtgtc
1200
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1260
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<211> 723

<212> PRT

<213> Homo sapiens

<400> 3414

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Tyr	Gly	Cys	Val	Gln	Gln	Pro	Lys	Thr	Gln	Glu	Ser	Lys	Leu	Lys	Ile
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Gly	Gly	Val	Ser	Ser	Val	Asn	Glu	Arg	Pro	Ile	Ala	Gln	Gln	Leu	Asn
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Pro	Gly	Phe	Gln	Leu	Ser	Phe	Ala	Ser	Ser	Gly	Pro	Ser	Val	Leu	Leu
65				70						75				80	
Pro	Ser	Val	Pro	Ala	Val	Ala	Ile	Lys	Val	Phe	Cys	Ser	Gly	Cys	Lys
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Lys	Met	Leu	Tyr	Lys	Gly	Gln	Thr	Ala	Tyr	His	Lys	Thr	Gly	Ser	Thr
			100					105					110		
Gln	Leu	Phe	Cys	Ser	Thr	Arg	Cys	Ile	Thr	Arg	His	Ser	Ser	Pro	Ala
		115				120						125			
Cys	Leu	Pro	Pro	Pro	Pro	Lys	Lys	Thr	Cys	Thr	Asn	Cys	Ser	Lys	Asp
		130				135					140				
Ile	Leu	Asn	Pro	Lys	Asp	Val	Ile	Thr	Thr	Arg	Phe	Glu	Asn	Ser	Tyr
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Pro	Ser	Lys	Asp	Phe	Cys	Ser	Gln	Ser	Cys	Leu	Ser	Ser	Tyr	Glu	Leu
			165						170					175	
Lys	Lys	Lys	Pro	Val	Val	Thr	Ile	Tyr	Thr	Lys	Ser	Ile	Ser	Thr	Lys
			180					185					190		
Cys	Ser	Met	Cys	Gln	Lys	Asn	Ala	Asp	Thr	Arg	Phe	Glu	Val	Lys	Tyr

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Gln	Asn	Val	Val	His	Gly	Leu	Cys	Ser	Asp	Ala	Cys	Phe	Ser	Lys	Phe
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His	Ser	Thr	Asn	Asn	Leu	Thr	Thr	Asn	Cys	Cys	Glu	Asn	Cys	Gly	Ser
225					230					235					240
Tyr	Cys	Tyr	Ser	Ser	Ser	Gly	Pro	Cys	Gln	Ser	Gln	Lys	Val	Phe	Ser
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Ser	Thr	Ser	Val	Thr	Ala	Tyr	Lys	Gln	Asn	Ser	Ala	Gln	Ile	Pro	Pro
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Tyr	Ala	Leu	Gly	Lys	Ser	Leu	Arg	Ser	Ser	Ala	Glu	Met	Ile	Glu	Asn
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Thr	Asn	Ser	Leu	Gly	Lys	Thr	Glu	Leu	Phe	Cys	Ser	Ile	Asn	Cys	Leu
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Cys	His	Ser	Cys	Lys	Thr	Ser	Ala	Ile	Pro	Gln	Tyr	His	Leu	Ala	Met
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Ser	Asp	Gly	Thr	Ile	Tyr	Ser	Phe	Cys	Ser	Ser	Ser	Cys	Val	Val	Ala
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Phe	Gln	Asn	Val	Phe	Ser	Lys	Pro	Lys	Gly	Thr	Asn	Ser	Ser	Ala	Val
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Pro	Leu	Ser	Gln	Gly	Gln	Val	Val	Ser	Pro	Pro	Ser	Ser	Ser	Arg	Ser
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Ala	Val	Ser	Ile	Gly	Gly	Gly	Asn	Thr	Ser	Ala	Val	Ser	Pro	Ser	Ser
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Ile	Arg	Gly	Ser	Ala	Ala	Ala	Ser	Leu	Gln	Pro	Leu	Gly	Glu	Gln	Ser
					405				410					415	
Gln	Gln	Val	Ala	Leu	Thr	His	Thr	Val	Val	Lys	Leu	Lys	Cys	Gln	His
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Cys	Asn	His	Leu	Phe	Ala	Thr	Lys	Pro	Glu	Leu	Leu	Phe	Tyr	Lys	Gly
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Lys	Met	Phe	Leu	Phe	Cys	Gly	Lys	Asn	Cys	Ser	Asp	Glu	Tyr	Lys	Lys
		450				455					460				
Lys	Asn	Lys	Val	Val	Ala	Met	Cys	Glu	Tyr	Cys	Lys	Ile	Glu	Lys	Ile
465					470					475					480
Val	Lys	Glu	Thr	Val	Arg	Phe	Ser	Gly	Ala	Asp	Lys	Ser	Phe	Cys	Ser
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Glu	Gly	Cys	Lys	Leu	Leu	Tyr	Lys	His	Asp	Leu	Ala	Lys	Arg	Trp	Gly
			500					505					510		
Asn	His	Cys	Lys	Met	Cys	Ser	Tyr	Cys	Ser	Gln	Thr	Ser	Pro	Asn	Leu
			515				520					525			
Val	Gln	Asn	Arg	Leu	Glu	Gly	Lys	Leu	Glu	Glu	Phe	Cys	Cys	Glu	Asp
			530			535					540				
Cys	Met	Ser	Lys	Phe	Thr	Val	Leu	Phe	Tyr	Gln	Met	Ala	Lys	Cys	Asp
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Gly	Cys	Lys	Arg	Gln	Gly	Lys	Leu	Ser	Glu	Ser	Ile	Lys	Trp	Arg	Gly
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Asn	Ile	Lys	His	Phe	Cys	Asn	Leu	Phe	Cys	Val	Leu	Glu	Phe	Cys	His
			580					585					590		
Gln	Gln	Ile	Met	Asn	Asp	Cys	Leu	Pro	Gln	Asn	Lys	Val	Asn	Ile	Ser
		595					600						605		
Lys	Ala	Lys	Thr	Ala	Val	Thr	Glu	Leu	Pro	Ser	Ala	Arg	Thr	Asp	Thr
		610				615					620				
Thr	Pro	Val	Ile	Thr	Ser	Val	Met	Ser	Leu	Ala	Lys	Ile	Pro	Ala	Thr


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625          630          635          640
Leu Ser Thr Gly Asn Thr Asn Ser Val Leu Lys Gly Ala Val Thr Lys
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Glu Ala Ala Lys Ile Ile Gln Asp Glu Ser Thr Gln Glu Asp Ala Met
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Lys Phe Pro Ser Ser Gln Ser Ser Gln Pro Ser Arg Leu Leu Lys Asn
          675          680          685
Lys Gly Ile Ser Cys Lys Pro Val Thr Gln Thr Lys Ala Thr Ser Cys
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<210> 3415
<211> 3501
<212> DNA
<213> Homo sapiens

<400> 3415
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240
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420
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1020

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<210> 3416

<211> 259

<212> PRT

<213> Homo sapiens

<400> 3416

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Asn Pro Ala Phe Lys Pro Val Leu Ala Ile Ile Gln Ala Gly Asp Asp
 35           40           45
Asn Leu Met Gln Glu Ile Asn Gln Asn Leu Ala Glu Ala Gly Leu
 50           55           60
Asn Ile Thr His Ile Cys Leu Pro Pro Asp Ser Ser Glu Ala Glu Ile
 65           70           75           80
Ile Asp Glu Ile Leu Lys Ile Asn Glu Asp Thr Arg Val His Gly Leu
 85           90           95
Ala Leu Gln Ile Ser Glu Asn Leu Phe Ser Asn Lys Val Leu Asn Ala
100           105           110
Leu Lys Pro Glu Lys Asp Val Asp Gly Val Thr Asp Ile Asn Leu Gly
115           120           125
Lys Leu Val Arg Gly Asp Ala His Glu Cys Phe Val Ser Pro Val Ala

```

```

      130              135              140
Lys Ala Val Ile Glu Leu Leu Glu Lys Ser Val Gly Val Asn Leu Asp
145              150              155              160
Gly Lys Lys Ile Leu Val Val Gly Ala His Gly Ser Leu Glu Ala Ala
      165              170              175
Leu Gln Cys Leu Phe Gln Arg Lys Gly Ser Met Thr Met Ser Ile Gln
      180              185              190
Trp Lys Thr Arg Gln Leu Gln Ser Lys Leu His Glu Ala Asp Ile Val
      195              200              205
Val Leu Gly Ser Pro Lys Pro Glu Glu Ile Pro Leu Thr Trp Ile Gln
      210              215              220
Pro Gly Thr Thr Val Leu Asn Cys Ser His Asp Phe Leu Ser Gly Lys
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Val Gly Cys Gly Ser Pro Arg Ile Xaa Ile Leu Val Asp Ser Leu Arg
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<210> 3417
<211> 405
<212> DNA
<213> Homo sapiens

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<210> 3418
<211> 94
<212> PRT
<213> Homo sapiens

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<400> 3418
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Leu Glu Arg Arg Cys Ser Pro Asn Leu Ser Arg Glu Val Leu Tyr Glu
      20      25      30
Ile Phe Arg Ser Leu His Thr Leu Val Gly Gln Leu Asp Leu Arg Asp
      35      40      45
Asp Val Val Lys Ile Thr Ile Asp Trp Asn Lys Leu Gln Ser Leu Ser
      50      55      60
Ala Phe Gln Pro Ala Leu Leu Phe Ser Ala Leu Glu Gln His Ile Leu

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```

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Tyr Leu Gln Val Asn Phe Leu Leu Glu Met Ile Thr Arg Tyr
              85              90

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<210> 3419
<211> 418
<212> DNA
<213> Homo sapiens
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120
aatggggcta cgtcgcgtga cctcacgtgt ggttcctctg agcgtagtgc ttccaggggc
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418

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<210> 3420
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<212> PRT
<213> Homo sapiens
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<400> 3420
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Ile Asp Val Asp Pro Gly Glu Met Gln Thr Ser Val His Asn Gly Thr
          20          25          30
Cys Cys Leu Ala Leu Lys Ala His Arg Arg Pro Cys Val His Leu His
          35          40          45
Cys Asp Thr Val Ala Leu Glu Ser Thr Thr Leu Arg Gly Thr Thr Arg
          50          55          60
Glu Val Thr Arg Arg Ser Pro Ile Asn Met Lys His Pro Glu Gln Gly
65          70          75          80
Glu Pro Gly Gly Pro Ala Asp Gln Trp Val Pro Arg Arg Glu Trp Ala
          85          90          95
Gly Trp Asp Gly Ser Gly Val Asn Arg
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<211> 2988
<212> DNA
<213> Homo sapiens
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<210> 3422

<211> 418

<212> PRT

<213> Homo sapiens

<400> 3422

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Phe	Ser	Ser	Lys	Thr	Val	Thr	Val	Leu	Leu	Leu	Ala	Gln	Thr	Thr	Cys				
		35					40					45							
Leu	Leu	Leu	Phe	Ile	Ile	Ser	Arg	Pro	Gly	Pro	Ser	Ser	Pro	Ala	Gly				
	50					55					60								
Gly	Glu	Asp	Arg	Val	His	Val	Leu	Val	Leu	Ser	Ser	Trp	Arg	Ser	Gly				
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Ser	Ser	Phe	Leu	Gly	Gln	Leu	Phe	Ser	Gln	His	Pro	Asp	Val	Phe	Tyr				
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Leu	Met	Glu	Pro	Ala	Trp	His	Val	Trp	Thr	Thr	Leu	Ser	Gln	Gly	Ser				
			100					105					110						
Ala	Ala	Thr	Leu	His	Met	Ala	Val	Arg	Asp	Leu	Met	Arg	Ser	Ile	Phe				
		115						120				125							
Leu	Cys	Asp	Met	Asp	Val	Phe	Asp	Ala	Tyr	Met	Glu	Pro	Gly	Pro	Arg				
		130				135					140								
Arg	Gln	Ser	Ser	Leu	Phe	Gln	Trp	Glu	Asn	Ser	Arg	Ala	Leu	Cys	Ser				
145				150						155					160				
Ala	Pro	Ala	Cys	Asp	Ile	Ile	Pro	Gln	Asp	Glu	Ile	Ile	Pro	Arg	Ala				
			165						170					175					
His	Cys	Arg	Leu	Leu	Cys	Ser	Gln	Gln	Pro	Phe	Glu	Val	Val	Glu	Lys				
		180						185					190						
Ala	Cys	Arg	Ser	Tyr	Ser	His	Val	Val	Leu	Lys	Glu	Val	Arg	Phe	Phe				
		195					200					205							
Asn	Leu	Gln	Ser	Leu	Tyr	Pro	Leu	Leu	Lys	Asp	Pro	Ser	Ser	Leu	Asn				
	210					215					220								
His	Ile	Val	His	Leu	Val	Arg	Asp	Pro	Arg	Ala	Val	Leu	Arg	Ser	Arg				
225				230						235					240				
Glu	Ala	Ala	Gly	Pro	Ile	Leu	Ala	Arg	Asp	Asn	Gly	Ile	Val	Leu	Gly				
			245						250					255					
Thr	Asn	Gly	Lys	Trp	Val	Glu	Ala	Asp	Pro	His	Leu	Arg	Leu	Ile	Arg				
		260						265					270						
Glu	Val	Cys	Arg	Ser	His	Val	Arg	Ile	Ala	Glu	Ala	Ala	Thr	Leu	Lys				
	275						280					285							
Pro	Pro	Pro	Phe	Leu	Arg	Gly	Arg	Tyr	Arg	Leu	Val	Arg	Phe	Glu	Asp				
	290					295					300								
Leu	Ala	Arg	Glu	Pro	Leu	Ala	Glu	Ile	Arg	Ala	Leu	Tyr	Ala	Phe	Thr				
305				310						315					320				
Gly	Leu	Thr	Leu	Thr	Pro	Gln	Leu	Glu	Ala	Trp	Ile	His	Asn	Ile	Thr				
			325						330					335					
His	Gly	Ser	Gly	Ile	Gly	Lys	Pro	Ile	Glu	Ala	Phe	His	Thr	Ser	Ser				
			340						345				350						
Arg	Asn	Ala	Arg	Asn	Val	Ser	Gln	Ala	Trp	Arg	His	Ala	Leu	Pro	Phe				
	355						360					365							
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<210> 3423

<211> 1851

<212> DNA

<213> Homo sapiens

<400> 3423

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120
cgttcattgg ccgtggcctc tctagctccg cccctaggg gggtcgaccc cgtaacacgt
180
gaggcgccggg ccaacctagt gcgacgtgtg ggcgtggcgg gggctggggg ctgcgggcga
240
aggtggtagc ccattggagg tcccgggagc gaagtcagc tgccttagg cgtggggata
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360
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420
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480
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540
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660
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720
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780
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1380
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1440
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1500

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1560
ccagaccgcc ctgggtgtga gatgtgtagc acccagaggc cctgcacttg ggacccccct
1620
gctgcagctt ccacctagca gccaccagag gttacaaggg gagagtggcc ctteccctac
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1740
acagtccacca ggggtggggg gaagggccac aaaatgaaac cattaagagc ccttaagagc
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1851

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<210> 3424
<211> 136
<212> PRT
<213> Homo sapiens

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<400> 3424
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Gln Arg Trp Val Ile Gly Arg Cys Leu Cys Val Pro Glu Arg Ser Leu
20 25 30
Ala Ser Tyr Gly Val Arg Gln Asp Gly Asp Pro Ala Phe Leu Tyr Leu
35 40 45
Leu Ser Ala Pro Arg Glu Ala Pro Ala Thr Gly Pro Ser Pro Gln His
50 55 60
Pro Gln Lys Met Asp Gly Glu Leu Gly Arg Leu Phe Pro Pro Ser Leu
65 70 75 80
Gly Leu Pro Pro Gly Pro Gln Pro Ala Ala Ser Ser Leu Pro Ser Pro
85 90 95
Leu Gln Pro Ser Trp Ser Cys Pro Ser Cys Thr Phe Ile Asn Ala Pro
100 105 110
Asp Arg Pro Gly Cys Glu Met Cys Ser Thr Gln Arg Pro Cys Thr Trp
115 120 125
Asp Pro Leu Ala Ala Ala Ser Thr
130 135

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<210> 3425
<211> 1416
<212> DNA
<213> Homo sapiens

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<400> 3425
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120
gaggaggaa tgaggccgcg cggaaggaa ggcggcagcc ccggggcccc gaggccttg
180
ccgcgtcaca gcaccacat ggcctctgga gtgggcgcgg ccttcgagga actgcctac
240
gacggcacgt gtgacgagt cgagcccgac gaggctccgg gggccgagga agtgtgccga
300

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gaatgcggct tctgctactg ccgccgccat gccgaggcgc acaggcagaa gttcctcagt
 360
 caccatctcg ccgaatacgt ccacggctcc caggcctgga ccccgccagc tgacggagag
 420
 ggggcgggga aggaagaagc ggaggtcaag gtggagcagg agaggagat agaaagcgag
 480
 gcaggggaaag agagtgaatc ggaggaagag agcaggtcag aggaagagag cgagacagag
 540
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 gatgagcaag aaagcgaggc cgaagaagac aaccaagaag aaggggaatc cgaggcggag
 660
 ggagaaactg aggcagaaaag tgaatttgac ccagaaatag aaatggaagc agagagagtg
 720
 gccaaagaga agtggtccga ccatgggctt gatttgagta cctattgcc aagaatagag
 780
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 840
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 900
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 1320
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<210> 3426

<211> 410

<212> PRT

<213> Homo sapiens

<400> 3426

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 Ala Pro Gly Pro Ala Ser Arg Arg Gly Ala Val Gln Ala Gly Gly Asp
 20 25 30
 Ser Leu Gly Arg Asp Pro Gly Arg Glu Glu Val Arg Pro Arg Gly
 35 40 45
 Arg Lys Ala Ala Ser Pro Gly Ala Pro Arg Pro Trp Pro Arg His Ser
 50 55 60
 Thr His Met Ala Ser Gly Val Gly Ala Ala Phe Glu Glu Leu Pro His

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65          70          75          80
Asp Gly Thr Cys Asp Glu Cys Glu Pro Asp Glu Ala Pro Gly Ala Glu
85
Glu Val Cys Arg Glu Cys Gly Phe Cys Tyr Cys Arg Arg His Ala Glu
100
Ala His Arg Gln Lys Phe Leu Ser His His Leu Ala Glu Tyr Val His
115
Gly Ser Gln Ala Trp Thr Pro Pro Ala Asp Gly Glu Gly Ala Gly Lys
130
Glu Glu Ala Glu Val Lys Val Glu Gln Glu Arg Glu Ile Glu Ser Glu
145
Ala Gly Glu Glu Ser Glu Ser Glu Glu Ser Glu Ser Glu Glu Glu
165
Ser Glu Thr Glu Glu Glu Ser Glu Asp Glu Ser Asp Glu Glu Ser Glu
180
Glu Asp Ser Glu Glu Glu Met Glu Asp Glu Gln Glu Ser Glu Ala Glu
195
Glu Asp Asn Gln Glu Glu Gly Glu Ser Glu Ala Glu Gly Glu Thr Glu
210
Ala Glu Ser Glu Phe Asp Pro Glu Ile Glu Met Glu Ala Glu Arg Val
225
Ala Lys Arg Lys Cys Pro Asp His Gly Leu Asp Leu Ser Thr Tyr Cys
245
Gln Glu Asp Arg Gln Leu Ile Cys Val Leu Cys Pro Val Ile Gly Ala
260
His Gln Gly His Gln Leu Ser Thr Leu Asp Glu Ala Phe Glu Glu Leu
275
Arg Ser Lys Asp Ser Gly Gly Leu Lys Ala Ala Met Ile Glu Leu Val
290
Glu Arg Leu Lys Phe Lys Ser Ser Asp Pro Lys Val Thr Arg Asp Gln
305
Met Lys Met Phe Ile Gln Gln Glu Phe Lys Lys Val Gln Lys Val Ile
325
Ala Asp Glu Glu Gln Lys Ala Leu His Leu Val Asp Ile Gln Glu Ala
340
Met Ala Thr Ala His Val Thr Glu Ile Leu Ala Asp Ile Gln Ser His
355
Met Asp Arg Leu Met Thr Gln Met Ala Gln Ala Lys Glu Gln Leu Asp
370
Thr Ser Asn Glu Ser Ala Glu Pro Lys Ala Glu Gly Asp Glu Glu Gly
385
Pro Ser Gly Ala Ser Glu Glu Glu Asp Thr
405
410

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<210> 3427

<211> 580

<212> DNA

<213> Homo sapiens

<400> 3427

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ccggatttca atgtcatagt tccattgtc aatgacatca tcggagaact tgacctgctg
120

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gggctctgat tgagacttgg accttctgag cactggcaga tgtactggct tctcttcagg
 180
 caggatcttc tctggacaca actctgaact tagactcttt aaggactctg cactcctgtg
 240
 cagcatggaa gaggccaag ttcccatatt gctcatcttc tcacaatctt ctgtttccat
 300
 ctccctcaaaa ttttgcagag aatacaatga tggccttggc ttgtttcttc caccaccga
 360
 agccctctgt atattggaca atgccaaga atccatcgaa tccgaacac ttgtctctgt
 420
 tttcaggctt gacagacact ccagggaatc ttcataccac tgtgtttcat catgattata
 480
 ccctgaagcc ccatgggtcca gttccaatc ctgaagcctt ctactgcttg cagggccttg
 540
 gtggctgcca taagcagaat cgcccagtc atcttctgac
 580

<210> 3428

<211> 132

<212> PRT

<213> Homo sapiens

<400> 3428

Met	Asp	Ser	Leu	Ala	Leu	Ser	Asn	Ile	Thr	Gly	Ala	Ser	Val	Asp	Gly
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Glu	Asn	Lys	Pro	Arg	Pro	Ser	Leu	Tyr	Ser	Leu	Gln	Asn	Phe	Glu	Glu
			20					25					30		
Met	Glu	Thr	Glu	Asp	Cys	Glu	Lys	Met	Ser	Asn	Met	Gly	Thr	Leu	Asn
			35				40					45			
Ser	Ser	Met	Leu	His	Arg	Ser	Ala	Glu	Ser	Leu	Lys	Ser	Leu	Ser	Ser
	50					55				60					
Glu	Leu	Cys	Pro	Glu	Lys	Ile	Leu	Pro	Glu	Glu	Lys	Pro	Val	His	Leu
	65				70				75					80	
Pro	Val	Leu	Arg	Arg	Ser	Lys	Ser	Gln	Ser	Arg	Pro	Gln	Gln	Val	Lys
			85					90					95		
Phe	Ser	Asp	Asp	Val	Ile	Asp	Asn	Gly	Asn	Tyr	Asp	Ile	Glu	Ile	Arg
		100					105					110			
Gln	Pro	Pro	Met	Ser	Glu	Arg	Thr	Arg	Arg	Arg	Val	Tyr	Asn	Phe	Glu
		115					120					125			
Glu	Arg	Gly	Ser												
	130														

<210> 3429

<211> 634

<212> DNA

<213> Homo sapiens

<400> 3429

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 120
 gtcagcttcc ttttcatact ttccggcggt tctctccacg agcaggtgca ccagggaact
 180

gtccctctgt cctacacggt caccacagt acgacccaag gcttccctt gcctacaggc
 240
 cagcacatcc ctggctgcag tgcccagcag ctcccagcat gctccgtgat gttcagtggg
 300
 cagcattacc cctctgtctg cctcccgcgc ccgcttatcc aggcgtgcac catgcagcag
 360
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 480
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 600
 ttgaaacact ctattacaa atgtgaacac gcgt
 634

<210> 3430

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3430

Phe	Leu	Leu	Arg	Val	Ala	Leu	Ala	Val	Ser	Phe	Leu	Phe	Ile	Leu	Ser
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Arg	Arg	Ser	Leu	His	Glu	Gln	Val	His	Gln	Gly	Pro	Val	Pro	Leu	Ser
			20					25					30		
Tyr	Thr	Val	Thr	Thr	Val	Thr	Thr	Gln	Gly	Phe	Pro	Leu	Pro	Thr	Gly
		35					40					45			
Gln	His	Ile	Pro	Gly	Cys	Ser	Ala	Gln	Gln	Leu	Pro	Ala	Cys	Ser	Val
	50					55				60					
Met	Phe	Ser	Gly	Gln	His	Tyr	Pro	Leu	Cys	Cys	Leu	Pro	Pro	Pro	Leu
65					70					75				80	
Ile	Gln	Ala	Cys	Thr	Met	Gln	Gln	Leu	Pro	Val	Pro	Tyr	Gln	Ala	Tyr
			85					90						95	
Pro	His	Leu	Ile	Ser	Ser	Asp	His	Tyr	Ile	Leu	His	Pro	Pro	Pro	Pro
			100				105							110	
Gly	Thr	His	Pro	Ala	Ala	Pro	Gly	Ser	Val						
		115					120								

<210> 3431

<211> 1396

<212> DNA

<213> Homo sapiens

<400> 3431

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 120
 ctgcgtggga gcagcgtccc aatgccagcg cgtcacgtcg ccagcgtgc cctagcacgc
 180
 agcgccgcca gccgtgtcgc caacagtacc aaatcgtcgt gcagcggcct cgcgccgcgc
 240

gacttcaacc attgacctcaa ggattgggac tataatggcc ttcctgtgct caccaccaac
 300
 gccatcgccc agtgggatctt ggtgtgtgac ctgggctggc aggtgatcct ggagcagatc
 360
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 420
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 480
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 540
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 720
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 780
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 840
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 900
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 1020
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<210> 3432

<211> 296

<212> PRT

<213> Homo sapiens

<400> 3432

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 Gly Val Tyr Leu Met Arg Leu Glu Leu Cys Asp Pro Thr Gln Arg Leu
 20 25 30
 Arg Val Ala Leu Ala Gly Glu Leu Val Gly Val Gly Gly His Phe Leu
 35 40 45
 Phe Leu Gly Leu Ala Leu Val Ser Lys Asp Trp Arg Phe Leu Gln Arg

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      50              55              60
Met Ile Thr Ala Pro Cys Ile Leu Phe Leu Phe Tyr Gly Trp Pro Gly
65              70              75              80
Leu Phe Leu Glu Ser Ala Arg Trp Leu Ile Val Lys Arg Gln Ile Glu
      85              90              95
Glu Ala Gln Ser Val Leu Arg Ile Leu Ala Glu Arg Asn Arg Pro His
      100              105              110
Gly Gln Met Leu Gly Glu Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu
      115              120              125
Asn Thr Cys Pro Leu Pro Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu
      130              135              140
Leu Asn Tyr Arg Asn Ile Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr
145              150              155              160
Asn Phe Ile Ala His Ala Ile Arg His Cys Tyr Gln Pro Val Gly Gly
      165              170              175
Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly
      180              185              190
Thr Ala Ala Leu Ala Cys Val Phe Leu Gly Val Thr Val Asp Arg Phe
      195              200              205
Gly Arg Arg Gly Ile Leu Leu Leu Ser Met Thr Leu Thr Gly Ile Ala
      210              215              220
Ser Leu Val Leu Leu Gly Leu Trp Asp Cys Glu His Pro Ile Phe Pro
      225              230              235
Thr Val Trp Ala Gln Gln Gly Asn Pro Asn Arg Asp Leu Asn Glu Ala
      245              250              255
Ala Ile Thr Thr Phe Ser Val Leu Gly Leu Phe Ser Ser Gln Ala Ala
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Arg Gly Arg Gly Leu Gly Leu Ile
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<210> 3433

<211> 1257

<212> DNA

<213> Homo sapiens

<400> 3433

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240
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360
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420
ggtgaggact cgcggggggg agggcagggg gtcctgtctg tctcagtggt gcggtacgac
480

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780
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1080
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<210> 3434

<211> 311

<212> PRT

<213> Homo sapiens

<400> 3434

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Gly Arg Gln Arg Pro Gln Arg Pro Ser His Ser Arg Ser His Thr Arg
35      40      45
Ser Asn Leu Lys Arg Asp Val Ala His Leu Tyr Arg Gly Val Gly Ser
50      55      60
Arg Tyr Ile Met Gly Ser Gly Glu Ser Phe Met Gln Leu Gln Gln Arg
65      70      75      80
Leu Leu Arg Glu Lys Glu Ala Lys Ile Arg Lys Ala Leu Asp Arg Leu
85      90      95
Arg Lys Lys Arg His Leu Leu Arg Arg Gln Arg Thr Arg Arg Glu Phe
100     105     110
Pro Val Ile Ser Val Val Gly Tyr Thr Asn Cys Gly Glu His Ala Pro
115     120     125
Arg Gly Gly Ala Phe Arg Gly Leu Arg Val Thr Gly Glu Asp Ser Pro
130     135     140
Gly Gly Gly Gln Gly Val Pro Val Val Ser Val Val Pro Tyr Asp Ser
145     150     155     160
Cys Gly Glu His Val Pro Arg Arg Gly Gly Ser His Gly Arg Arg Val

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165										170					175				
Gly	Tyr	Thr	Ser		Cys	Cys	Glu	Ser	Ser	Pro	Arg	Arg	Arg	Val	Ser	Cys			
				180					185					190					
Gly	Leu	Cys	Val		Gly	Tyr	Ser	Ser	Gln	Gly	Glu	Asp	Val	Ile	Tyr	Pro			
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Ile	Leu	Pro	Ser		Arg	Ala	Leu	Pro	Pro	Cys	Leu	Tyr	His	Asn	Leu	Pro			
				210					215					220					
Ser	Ile	Tyr	Thr		Ile	Leu	Leu	Ser	Arg	Pro	Ser	Pro	Leu	Pro	Tyr	Leu			
				225					230					235					
Tyr	His	His	Pro		Val	Tyr	Thr	Ile	His	Pro	Ser	Thr	Pro	Ser	Pro	Leu			
				245					250					255					
Leu	Cys	Leu	Tyr		His	Pro	Pro	Val	Tyr	Thr	Ser	Thr	Thr	Thr	Pro	Ser			
				260					265					270					
Ile	Pro	Pro	Pro		Arg	Leu	His	Asn	Pro	Pro	Val	Tyr	Thr	Thr	Met	Ser			
				275					280					285					
Pro	Ser	Ser	Ala		Pro	Ser	Ser	Cys	Leu	His	Trp	His	His	Cys	Pro	Ser			
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				305					310										

<210> 3435

<211> 1225

<212> DNA

<213> Homo sapiens

<400> 3435

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180	gacagcaatg	ccgataccta	ctgggagagc	gatgggtccc	agtccaaca	ctgggtacgg
240	cttactatga	agaagggcac	cattgtcaag	aagctgctac	tcgcagtgga	taccacagat
300	gacaaactta	tgccaagcgc	gggtggtgct	tatgggggtg	aaggggacaa	cctgaagaag
360	ctgagtgcg	tgagcattga	cnngagaccc	tcacggggn	atgtctgtgt	cctggaggac
420	atgacgtccc	acctcccgat	catcgagatc	cgcacgtggt	agtgcgcaga	tgatgggatt
480	gatgttcctg	tccgaggggt	caagatcaag	tcactagac	agcgggaact	agggttgaat
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600	gaagtactgt	accgcagagc	tgctcctctg	cagagattca	tcaagatcct	cgatagtgtc
660	ctgcaccacc	tggtacctgc	ctgggaccac	acactgggca	ccttcagtga	gattaagcaa
720	gtgaagcagt	tctactgtct	gtcccgccag	cggccaggcc	tggtggctca	gtgcctgcgt
780	gactctgaga	gcagcaagcc	cagcttcatt	ccacgcctat	acatcaaccg	ccgtcttgcc
840	atggaaacacc	gtgcctgccc	ctctcgagac	cctgcctgca	agaatgcagt	cttaccaccg

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 1020
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 1080
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<210> 3436

<211> 408

<212> PRT

<213> Homo sapiens

<400> 3436

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 20 25 30
 Glu Phe Asn Val Ser Cys Leu Thr Asp Ser Asn Ala Asp Thr Tyr Trp
 35 40 45
 Glu Ser Asp Gly Ser Gln Cys Gln His Trp Val Arg Leu Thr Met Lys
 50 55 60
 Lys Gly Thr Ile Val Lys Lys Leu Leu Leu Ala Val Asp Thr Thr Asp
 65 70 75 80
 Asp Asn Phe Met Pro Lys Arg Val Val Val Tyr Gly Gly Glu Gly Asp
 85 90 95
 Asn Leu Lys Lys Leu Ser Asp Val Ser Ile Asp Xaa Arg Pro Ser Ser
 100 105 110
 Gly Xaa Val Cys Val Leu Glu Asp Met Thr Val His Leu Pro Ile Ile
 115 120 125
 Glu Ile Arg Ile Val Glu Cys Arg Asp Asp Gly Ile Asp Val Arg Leu
 130 135 140
 Arg Gly Val Lys Ile Lys Ser Ser Arg Gln Arg Glu Leu Gly Leu Asn
 145 150 155 160
 Ala Asp Leu Phe Gln Pro Thr Ser Leu Val Arg Tyr Pro Arg Leu Glu
 165 170 175
 Gly Thr Asp Pro Glu Val Leu Tyr Arg Arg Ala Val Leu Leu Gln Arg
 180 185 190
 Phe Ile Lys Ile Leu Asp Ser Val Leu His His Leu Val Pro Ala Trp
 195 200 205
 Asp His Thr Leu Gly Thr Phe Ser Glu Ile Lys Gln Val Lys Gln Phe
 210 215 220
 Leu Leu Leu Ser Arg Gln Arg Pro Gly Leu Val Ala Gln Cys Leu Arg
 225 230 235 240
 Asp Ser Glu Ser Ser Lys Pro Ser Phe Met Pro Arg Leu Tyr Ile Asn
 245 250 255
 Arg Arg Leu Ala Met Glu His Arg Ala Cys Pro Ser Arg Asp Pro Ala

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                260                265                270
Cys Lys Asn Ala Val Phe Thr Gln Val Tyr Glu Gly Leu Lys Pro Ser
275                280                285
Asp Lys Tyr Glu Lys Pro Leu Asp Tyr Arg Trp Pro Met Arg Tyr Asp
290                295                300
Gln Trp Trp Glu Cys Lys Phe Ile Ala Glu Gly Ile Asp Gln Gly
305                310                315                320
Gly Gly Phe Arg Asp Ser Leu Ala Asp Met Ser Glu Glu Leu Cys Pro
325                330                335
Ser Ser Ala Asp Thr Pro Val Pro Leu Pro Phe Phe Val Arg Thr Ala
340                345                350
Asn Gln Gly Asn Gly Thr Gly Glu Ala Arg Asp Met Tyr Val Pro Asn
355                360                365
Pro Ser Cys Arg Asp Phe Ala Lys Tyr Glu Trp Ile Gly Gln Leu Met
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<210> 3437

<211> 2081

<212> DNA

<213> Homo sapiens

<400> 3437

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720
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780
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840

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 1920
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<210> 3438

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3438

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 Glu Ala Glu Pro Gln Trp Glu Arg Glu Gly Ala Arg Phe Thr Thr Pro

400> 3439						
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1140						

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<210> 3440

<211> 287

<212> PRT

<213> Homo sapiens

<400> 3440

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			20					25					30		
Val	Ala	Ala	Ala	Ala	Arg	Trp	Pro	Arg	Gln	Pro	Arg	His	Pro	Arg	His
			35				40					45			
Thr	Ser	Pro	Met	Pro	Pro	Pro	Ala	Ala	Leu	Arg	Pro	Pro	Ala	Gly	Pro
			50			55					60				
Arg	Arg	Pro	Arg	Xaa	Pro	Gly	Gly	Pro	Gln	His	His	Gln	Pro	Gln	Pro
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Pro	Leu	Trp	Thr	Pro	Thr	Pro	Pro	Ser	Pro	Ala	Ser	Asp	Trp	Pro	Pro
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Leu	Pro	Pro	Asn	Arg	Pro	Pro	Gln	Asn	Pro	Gly	Pro	Thr	Leu	Pro	Trp
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Arg	Gln	Arg	Asp	Lys	Gly	Gly	Pro	Ser	Pro	Leu	Pro	Glu	Ala	Arg	Thr
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Pro	Trp	Gly	Gly	Gly	Glu	Asp	Val	Ser	Ala	Gly	Pro	Leu	Xaa	Thr	Pro
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			165						170					175	
His	Thr	Gln	Gly	His	Gly	Pro	Ser	Gly	Pro	Gly	Thr	Trp	Ser	Gly	Ser
			180					185					190		
Glu	Arg	Pro	Gly	Cys	Leu	Ala	Asp	Arg	Thr	Ser	Glu	Thr	Thr	Gln	Pro
		195					200					205			
Ser	Phe	Glu	Asp	Ala	Pro	Ala	Gln	Pro	Ser	Pro	Gly	Val	Pro	Trp	Arg
		210				215					220				
Thr	Thr	Leu	Ala	Glu	Thr	Leu	Leu	Ile	Pro	Gly	Leu	Glu	Leu	Leu	Gly
225					230					235				240	
Gly	Arg	Gln	Ala	Ser	Thr	Pro	Thr	Leu	Gly	Asn	Ala	Glu	Pro	Leu	Arg
				245					250					255	
Met	Cys	Ala	Arg	Gly	Arg	Val	Cys	Val	Phe	Leu	Arg	Val	Ser	Leu	Phe

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Arg	Ser	Asn	Leu	Val	Pro	Gly	Ala	Ala	Gly	Leu	Cys	Met	Leu	Val
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<210> 3441
 <211> 2074
 <212> DNA
 <213> Homo sapiens

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 1080
 tttgcccttg aggaacttctg cagcagcctc ttcgatggct tcttcctcac cgctctcca
 1140
 aggaaggaga acgtgcaccg gcacgcgctg cggctcctca ttcacctgca cccagggtg
 1200
 gcccatcta agctggaggc gttgcagaag gcctggagc ctacaggcca gagcgagag
 1260
 gcagtgaagg agctttactc ccagctcgcc gagaagctgg aacagctgga tcaccggaag
 1320


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cccagccccg cacaggtctc ggagacgccg gccctggagc tgccctccc cagcgtgccc
1380
gccctcgccc cgctctgagg gccctccaga cctgctcggg tgctggggcc atgccagatc
1440
gcggccctgc tcagccggaa gaggtcccc gacctggatg tacagggcag tctctcttcc
1500
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1560
ggctcccga ccttgccac catccatgca gtggctccca gggcagagcc tctccttgta
1620
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1680
tgttttccaa ggggagaggg cggggcctga gggggggggc ggggcctctt cattggccca
1740
gcttggcgaa agcagggcac actgcttact gccctggggt tgtggagatg gacctgtgac
1800
ctcgtggagg ccgtgtgggg gcagcagcct ggcctgtgcc atggtgggtg tcttggggcc
1860
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1920
tgccagcag tgctgccttc agcggccgtg acggggccag ctggacacac ggtgagattt
1980
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2040
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2074

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<210> 3442

<211> 374

<212> PRT

<213> Homo sapiens

<400> 3442

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Met Val Gly Lys Asn Val Lys Leu Tyr Asp Met Val Leu Gln Phe Leu
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Arg Thr Leu Phe Leu Arg Thr Arg Asn Val His Tyr Cys Thr Leu Arg
20     25     30
Ala Glu Leu Leu Met Ser Leu His Asp Leu Asp Val Gly Glu Ile Cys
35     40     45
Thr Val Asp Pro Cys His Lys Phe Thr Trp Cys Leu Asp Ala Cys Ile
50     55     60
Arg Glu Arg Phe Val Asp Ser Lys Arg Ala Arg Glu Leu Gln Gly Phe
65     70     75     80
Leu Asp Asp Val Lys Lys Gly Gln Glu Gln Val Leu Gly Asp Leu Ser
85     90     95
Met Ile Leu Cys Asp Pro Phe Ala Ile Asn Thr Leu Ala Leu Ser Thr
100    105    110
Val Arg His Leu Gln Glu Leu Val Gly Gln Glu Thr Leu Pro Arg Asp
115    120    125
Ser Pro Asp Leu Leu Leu Leu Arg Leu Leu Ala Leu Gly Gln Gly
130    135    140
Ala Trp Asp Met Ile Asp Ser Gln Val Phe Lys Glu Pro Lys Met Glu
145    150    155    160
Val Glu Leu Ile Thr Arg Phe Leu Pro Met Leu Met Ser Phe Leu Val

```

```

      165              170              175
Asp Asp Tyr Thr Phe Asn Val Asp Gln Lys Leu Pro Ala Glu Glu Lys
      180              185              190
Ala Pro Val Ser Tyr Pro Asn Thr Leu Pro Glu Ser Phe Thr Lys Phe
      195              200              205
Leu Gln Glu Gln Arg Met Ala Cys Glu Val Gly Leu Tyr Tyr Val Leu
      210              215              220
His Ile Thr Lys Gln Arg Asn Lys Asn Ala Leu Leu Arg Leu Leu Pro
      225              230              235              240
Gly Leu Val Glu Thr Phe Gly Asp Leu Ala Phe Gly Asp Ile Phe Leu
      245              250              255
His Leu Leu Thr Gly Asn Leu Ala Leu Leu Ala Asp Glu Phe Ala Leu
      260              265              270
Glu Asp Phe Cys Ser Ser Leu Phe Asp Gly Phe Phe Leu Thr Ala Ser
      275              280              285
Pro Arg Lys Glu Asn Val His Arg His Ala Leu Arg Leu Leu Ile His
      290              295              300
Leu His Pro Arg Val Ala Pro Ser Lys Leu Glu Ala Leu Gln Lys Ala
      305              310              315              320
Leu Glu Pro Thr Gly Gln Ser Gly Glu Ala Val Lys Glu Leu Tyr Ser
      325              330              335
Gln Leu Gly Glu Lys Leu Glu Gln Leu Asp His Arg Lys Pro Ser Pro
      340              345              350
Ala Gln Ala Ala Glu Thr Pro Ala Leu Glu Leu Pro Leu Pro Ser Val
      355              360              365
Pro Ala Pro Ala Pro Leu
      370

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<210> 3443

<211> 2070

<212> DNA

<213> Homo sapiens

<400> 3443

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aacaaaaataa aggtatgcta tgttgactat ggttttagtg aaaatgttga aaaaagcaaa
120
gcatacaaat taaaccggaa gttttgttca ctctcatttc aagctacaaa atgtaagctt
180
gcaggctcttg aagtccaaag cgatgacct gatctagtga aggtggttga atctttaact
240
tgtggaaaga tctttgcagt ggaataactt gacaaagctg acattccact tgtgtgtctg
300
tacgataacct caggagaaga tgatatcaat atcaatgcc cctgcttgaa ggctatatgt
360
gacaagtcac tagaggttca cctgcagggt gacgccatgt acacaaatgt caaaataact
420
aatatttctg ctgatgggac actctactgc caggtgcctt gtaagggtct gaacaagctc
480
agtgaacctt tacgtaagat agaggactac ttccattgca agcacatgac ctctgagtg
540
ttgtttcat tacccttctg tgggaaaatc tgcctcttcc attgcaaagg aaaatgggtta
600

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cgagtagaga tcacaaatgt tcacagcagc cgggctcttg atgttcagtt cctggactct
660
ggcactgtga catctgtaaa agtgtcagag ctacagggaaa ttccacctcg gttttacaa
720
gaaatgattg caataccacc tcaggccatt aagtgtctgt tagcagatct tccacaatct
780
attggcatgt ggacaccaga tgcagtctgt tggtaagag attctgtttt gaattgtctg
840
gactgtagca ttaaggttac aaaagtggat gaaaccagag ggatcgca tgtttattta
900
tttaccctta agaacttccc tgacctcat cgcagtatta atcgccagat tacaaatgca
960
gacttgtgga agcatcagaa ggatgtgttt ttgagtgtcca tatccagtgg agctgactct
1020
cccaacagca aaaatggcaa catgcccagt tcgggcaaca ctggagagaa tttcagaaag
1080
aacctcacag atgtcatcaa aaagtccatg gtggaccata cgagcgcttt ctccacagag
1140
gaactgtccc ctctgtcca cttatcaaa ccaggggaac acatggatgt gtatgtgcct
1200
gtggcctgtc acccaggcta cttcgtcatc cagccttggc aggagataca taagtggaa
1260
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1320
gagaaagacc aagtgtatgc tgcaaaagtg gaaaataagt ggcacagggg gcttttaaaa
1380
ggaatcctga ccaatggact ggtatctgtg tatgagctgg attatggcaa acacgaatta
1440
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1500
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1560
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1620
gctaaccctt gggaccggaa agtagtgggt tacttagtgg acacatcgtt gccagacacc
1680
gatacctgga ttcattgatt tatgtcagag tatctgatag agcttttcaa agttaattaa
1740
tgactgcctc tgaacctctg acaactaatt cagatttttt agcaataaca aaatgtagta
1800
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1860
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1920
aaagaaaaat gtacttgaat tattactata atattagaat aaaaatgttt atcaatataa
1980
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2040
aaaaaaaaaa aaaaaaaaaa aaaaaagggg
2070

<210> 3444

<211> 579

<212> PRT

<213> Homo sapiens

<400> 3444

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Leu Ala Val Asn Ala Glu Asp Ala Trp Leu Arg Ala Gln Val Ile
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Ser Thr Glu Glu Asn Lys Ile Lys Val Cys Tyr Val Asp Tyr Gly Phe
          20          25          30
Ser Glu Asn Val Glu Lys Ser Lys Ala Tyr Lys Leu Asn Pro Lys Phe
          35          40          45
Cys Ser Leu Ser Phe Gln Ala Thr Lys Cys Lys Leu Ala Gly Leu Glu
          50          55          60
Val Leu Ser Asp Asp Pro Asp Leu Val Lys Val Val Glu Ser Leu Thr
65          70          75          80
Cys Gly Lys Ile Phe Ala Val Glu Ile Leu Asp Lys Ala Asp Ile Pro
          85          90          95
Leu Val Val Leu Tyr Asp Thr Ser Gly Glu Asp Asp Ile Asn Ile Asn
          100          105          110
Ala Thr Cys Leu Lys Ala Ile Cys Asp Lys Ser Leu Glu Val His Leu
          115          120          125
Gln Val Asp Ala Met Tyr Thr Asn Val Lys Ile Thr Asn Ile Cys Ser
          130          135          140
Asp Gly Thr Leu Tyr Cys Gln Val Pro Cys Lys Gly Leu Asn Lys Leu
145          150          155          160
Ser Asp Leu Leu Arg Lys Ile Glu Asp Tyr Phe His Cys Lys His Met
          165          170          175
Thr Ser Glu Cys Phe Val Ser Leu Pro Phe Cys Gly Lys Ile Cys Leu
          180          185          190
Phe His Cys Lys Gly Lys Trp Leu Arg Val Glu Ile Thr Asn Val His
          195          200          205
Ser Ser Arg Ala Leu Asp Val Gln Phe Leu Asp Ser Gly Thr Val Thr
210          215          220
Ser Val Lys Val Ser Glu Leu Arg Glu Ile Pro Pro Arg Phe Leu Gln
225          230          235          240
Glu Met Ile Ala Ile Pro Pro Gln Ala Ile Lys Cys Cys Leu Ala Asp
          245          250          255
Leu Pro Gln Ser Ile Gly Met Trp Thr Pro Asp Ala Val Leu Trp Leu
          260          265          270
Arg Asp Ser Val Leu Asn Cys Ser Asp Cys Ser Ile Lys Val Thr Lys
          275          280          285
Val Asp Glu Thr Arg Gly Ile Ala His Val Tyr Leu Phe Thr Pro Lys
          290          295          300
Asn Phe Pro Asp Pro His Arg Ser Ile Asn Arg Gln Ile Thr Asn Ala
305          310          315          320
Asp Leu Trp Lys His Gln Lys Asp Val Phe Leu Ser Ala Ile Ser Ser
          325          330          335
Gly Ala Asp Ser Pro Asn Ser Lys Asn Gly Asn Met Pro Met Ser Gly
          340          345          350
Asn Thr Gly Glu Asn Phe Arg Lys Asn Leu Thr Asp Val Ile Lys Lys
          355          360          365
Ser Met Val Asp His Thr Ser Ala Phe Ser Thr Glu Glu Leu Pro Pro
          370          375          380
Pro Val His Leu Ser Lys Pro Gly Glu His Met Asp Val Tyr Val Pro
385          390          395          400
Val Ala Cys His Pro Gly Tyr Phe Val Ile Gln Pro Trp Gln Glu Ile

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              405              410              415
His Lys Leu Glu Val Leu Met Glu Glu Met Ile Leu Tyr Tyr Ser Val
              420              425              430
Ser Glu Glu Arg His Ile Ala Val Glu Lys Asp Gln Val Tyr Ala Ala
              435              440              445
Lys Val Glu Asn Lys Trp His Arg Val Leu Leu Lys Gly Ile Leu Thr
              450              455              460
Asn Gly Leu Val Ser Val Tyr Glu Leu Asp Tyr Gly Lys His Glu Leu
465              470              475              480
Val Asn Ile Arg Lys Val Gln Pro Leu Val Asp Met Phe Arg Lys Leu
              485              490              495
Pro Phe Gln Ala Val Thr Ala Gln Leu Ala Gly Val Lys Cys Asn Gln
              500              505              510
Trp Ser Glu Glu Ala Ser Met Val Phe Arg Asn His Val Glu Lys Lys
              515              520              525
Pro Leu Val Ala Leu Val Gln Thr Val Ile Glu Asn Ala Asn Pro Trp
              530              535              540
Asp Arg Lys Val Val Val Tyr Leu Val Asp Thr Ser Leu Pro Asp Thr
545              550              555              560
Asp Thr Trp Ile His Asp Phe Met Ser Glu Tyr Leu Ile Glu Leu Ser
              565              570              575
Lys Val Asn

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<210> 3445

<211> 2086

<212> DNA

<213> Homo sapiens

<400> 3445

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120
cctgcctgag agttgggccc cgggcggggg tggagcctac tcggggcgac tgcgatggac
180
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240
gctgtggttg gatatttaga ggacattatc atggatgacg agttccagtt attacagaga
300
aatttcattg acaagtacta cctggagttt gaagacacag aagagaataa actcatctac
360
acacctattt ttaatgaata catttctttg gtagaaaaat acattgaaga acagctgctg
420
cagcggattc ctgagttcaa catggcagcc ttcaccacaa cattacacca tctgttccgt
480
ttgaggcacc ataaggatga agtggtggtt gacatattcg acatgctgct caccttcaca
540
gattttcttg cttttaaaga aatgtttttt gactacagag cagaaaaaga aggcgcgagg
600
ctggacttaa gcagtggcctt agtggtgact tcattgtgca aatcatcttc tctgcacagt
660
tcccagaaca atctgcggca ctaggtccta cctccagcca atgaatggga tcattctgga
720

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tgtcaccagc ccaataggct cagctcatga tgacagaaca catcttgaa agactgactc
 780
 tgttatgtaa ctcttcattt atgttaagta ttaataggct aaaacaaaa tgacctaacc
 840
 ctctgggacc tatttatcct gaaacacctt ctgtattca ttaaccatag tactcctccc
 900
 cacctcaagt agacacctct ctccaggagct tctgagtcag acgctctgg agcgagccct
 960
 atgtcaggca ctccacctgg ggggcccttc ccacgatac ctgctgggtg gtaagtgtgg
 1020
 actaacccgc cggcaccacc ctctgttcca gcaggctctg catgaatctt tgtgcacttg
 1080
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 1260
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 1320
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 1380
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 1440
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 1560
 gctagaataa gactaaaaca tattcctata gcatgttagt gtgtttgcat gtttctgtaa
 1620
 aatcctttgt gtataaacca gtttgtaagg ttctctgggt taggtaggga ctctgcagtt
 1680
 tcttctctgc aaaatctctc ctaccaagat ggtgttcac tgtccagccc agcatgagta
 1740
 gcaggtagag cacagcttta ctggctgttt gtatgctttg gtttagtgca atgtgtggta
 1800
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 1860
 attccagtg tgccctttg attttttttt tttaaatagta aaaataagaa tctgtactga
 1920
 cttttcactt ggccattctg gttttaaagg acaagctaca agctctgtgt tctgtactg
 1980
 atgtgtcact tattaatac ttttgtacca tgagtaaaac ttcagggtgt tcgcaagaac
 2040
 caccattctc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa
 2086

<210> 3446

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3446

Met Asp Ala Leu Glu Glu Ser Phe Ala Leu Ser Phe Ser Ser Ala

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      1           5           10           15
Ser Asp Ala Glu Phe Asp Ala Val Val Gly Tyr Leu Glu Asp Ile Ile
      20           25           30
Met Asp Asp Glu Phe Gln Leu Leu Gln Arg Asn Phe Met Asp Lys Tyr
      35           40           45
Tyr Leu Glu Phe Glu Asp Thr Glu Glu Asn Lys Leu Ile Tyr Thr Pro
      50           55           60
Ile Phe Asn Glu Tyr Ile Ser Leu Val Glu Lys Tyr Ile Glu Glu Gln
      65           70           75           80
Leu Leu Gln Arg Ile Pro Glu Phe Asn Met Ala Ala Phe Thr Thr Thr
      85           90           95
Leu His His Leu Phe Arg Leu Arg His His Lys Asp Glu Val Ala Gly
      100          105          110
Asp Ile Phe Asp Met Leu Leu Thr Phe Thr Asp Phe Leu Ala Phe Lys
      115          120          125
Glu Met Phe Leu Asp Tyr Arg Ala Glu Lys Glu Gly Arg Gly Leu Asp
      130          135          140
Leu Ser Ser Gly Leu Val Val Thr Ser Leu Cys Lys Ser Ser Ser Leu
      145          150          155          160
Pro Ala Ser Gln Asn Asn Leu Arg His
      165

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<210> 3447

<211> 936

<212> DNA

<213> Homo sapiens

<400> 3447

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120
ggggtgcgct ttgaccgca gagggcgcg cgctgtggg aagcgtgtc cgggtccca
180
ccggtgggta gagaggaagt ggagcacatg atccagaaga accaatgtct cttcaccaac
240
acccagtgtg aggtttgctg cgcttgcct atttctgagt cccagaagct ggcacattac
300
cagagcaaaa aacatgcca caaagtgaag agatacctag caatccatgg aatggagaca
360
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420
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600
actttcaacg accctgtcat ggctcaaca cattatgtgg gcaagaaaca cagaaaacag
660
gagaccaagc taaactaat ggcacgctat gggcggtcgg cggaccctgc tgtcactgac
720
ttccagctg gaaagggcta ccctgcaaa acatgtaaga tagtgctgaa ctccatagaa
780

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cagtaccaag ctcatgtcag cggcttcaaa cacaagaacc agtcacaaaa aacagtggca
 840
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 900
 gaagactaga ggtgattctg cccagcatcc catatt
 936

<210> 3448

<211> 302

<212> PRT

<213> Homo sapiens

<400> 3448

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Val	Gln	Ala	Ala	Asp	Gly	Gly	Ala	Ala	Gly	Pro	Tyr	Ser	Ser	Ser	Glu
		20						25					30		
Leu	Leu	Glu	Gly	Gln	Glu	Pro	Asp	Gly	Val	Arg	Phe	Asp	Arg	Glu	Arg
		35					40					45			
Ala	Arg	Arg	Leu	Trp	Glu	Ala	Val	Ser	Gly	Ala	Gln	Pro	Val	Gly	Arg
	50					55					60				
Glu	Glu	Val	Glu	His	Met	Ile	Gln	Lys	Asn	Gln	Cys	Leu	Phe	Thr	Asn
	65				70					75				80	
Thr	Gln	Cys	Lys	Val	Cys	Cys	Ala	Leu	Leu	Ile	Ser	Glu	Ser	Gln	Lys
			85						90					95	
Leu	Ala	His	Tyr	Gln	Ser	Lys	Lys	His	Ala	Asn	Lys	Val	Lys	Arg	Tyr
		100					105						110		
Leu	Ala	Ile	His	Gly	Met	Glu	Thr	Leu	Lys	Gly	Glu	Thr	Lys	Lys	Leu
		115					120					125			
Asp	Ser	Asp	Gln	Lys	Ser	Ser	Arg	Ser	Lys	Asp	Lys	Asn	Gln	Cys	Cys
	130					135					140				
Pro	Ile	Cys	Asn	Met	Thr	Phe	Ser	Ser	Pro	Val	Val	Ala	Gln	Ser	His
	145					150				155				160	
Tyr	Leu	Gly	Lys	Thr	His	Ala	Lys	Asn	Leu	Lys	Leu	Lys	Gln	Gln	Ser
			165					170						175	
Thr	Lys	Val	Glu	Ala	Leu	His	Gln	Asn	Arg	Glu	Met	Ile	Asp	Pro	Asp
			180					185					190		
Lys	Phe	Cys	Ser	Leu	Cys	His	Ala	Thr	Phe	Asn	Asp	Pro	Val	Met	Ala
		195					200					205			
Gln	Gln	His	Tyr	Val	Gly	Lys	Lys	His	Arg	Lys	Gln	Glu	Thr	Lys	Leu
		210					215					220			
Lys	Leu	Met	Ala	Arg	Tyr	Gly	Arg	Leu	Ala	Asp	Pro	Ala	Val	Thr	Asp
	225					230				235				240	
Phe	Pro	Ala	Gly	Lys	Gly	Tyr	Pro	Cys	Lys	Thr	Cys	Lys	Ile	Val	Leu
			245						250					255	
Asn	Ser	Ile	Glu	Gln	Tyr	Gln	Ala	His	Val	Ser	Gly	Phe	Lys	His	Lys
		260						265					270		
Asn	Gln	Ser	Pro	Lys	Thr	Val	Ala	Ser	Ser	Leu	Gly	Gln	Ile	Pro	Met
		275					280						285		
Gln	Arg	Gln	Pro	Ile	Gln	Lys	Asp	Ser	Thr	Thr	Leu	Glu	Asp		
	290					295					300				

<210> 3449

<211> 877

<212> DNA

<213> Homo sapiens

<400> 3449

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120
ccggcccttc tggccggcac caaccccggt gctgtcgtcg cggatggagg cagttgccc
180
gcacactacc cgggtgcacga gtgcgtcttc aaggggggatg tgaaggagact ctctctctc
240
atccgcacgc acaatatcgg gcagaaagat aatcacggaa atactccttt acaccttgct
300
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360
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480
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540
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600
tacaacaacg gtatcaatat caggcttgac acaactctca tagactttac tgacatgaag
660
tgccaacagc gggatctaag ctctatttcc aatgggggatg cggcgccctc tgaatctttt
720
gtagtattag acaatgaaca aaaagtttat cagcgaatac atcatgaggc tcacatccca
780
ggaaatcagag atggaaacag aagaagaggt ggatatttta atgagcagtg atatttactc
840
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877

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<210> 3450

<211> 276

<212> PRT

<213> Homo sapiens

<400> 3450

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20 25 30
Ser Val Thr Ala Asn Ser Gln Ser Pro Ala Leu Leu Ala Gly Thr Asn
35 40 45
Pro Val Ala Val Val Ala Asp Gly Gly Ser Cys Pro Ala His Tyr Pro
50 55 60
Val His Glu Cys Val Phe Lys Gly Asp Val Arg Arg Leu Ser Ser Leu
65 70 75 80
Ile Arg Thr His Asn Ile Gly Gln Lys Asp Asn His Gly Asn Thr Pro
85 90 95
Leu His Leu Ala Val Met Leu Gly Asn Lys Glu Cys Ala His Leu Leu

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